

WEDNESDAY, MAY 1, 1872.

## ORIGINAL LECTURES.

### ON FIBROID TUMORS OF THE WOMB.

BY WILLIAM GOODELL, M.D.,

Physician in Charge of the Preston Retreat; Clinical Lecturer on the Diseases of Women and Children in the University of Pennsylvania, etc.

#### LECTURE I.

GENTLEMEN,—From the numerous opportunities which this clinic affords, you have long since discovered that the womb is more subject to benign, and perhaps to malignant, growths, than any other viscus of the body. These organic affections it is my purpose to take up in the order of their frequency; and I shall therefore begin, this morning, with the fibroid tumor, as the one most commonly met with.

The statistics on this point would be very startling, were they not somewhat contradictory. Thus: Mr. Pollock, the late Curator of the Museum of St. George's Hospital in London, reports (*Lancet*, February 7, 1852, p. 155) that, during a period of ten years, out of 583 women dying in the hospital of various diseases and at different ages, 39—seven per cent.—were found to have fibroid tumors of the womb; and that only one of these women was under the age of thirty. On the other hand, Bayle states (*Liverpool Medico-Chirurgical Journal*, vol. i. p. 61) that these tumors are present in twenty per cent. of all women over thirty-five years old; and Klob (*Pathological Anatomy of the Female Sexual Organs*, Am. ed., 1868, p. 177), that "undoubtedly forty per cent. of the uteri of females who die after the fiftieth year contain fibroid tumors." Here is an apparent want of harmony; but it can, in a measure, be explained, if we consider, first, the fact established by these statistics, that age is a predisposing cause; and secondly, the circumstance that these averages are based upon varying ages,—viz., upon different degrees of liability. Yet, while admitting the frequency of this disease, I believe that Bayle's and Klob's estimates are entirely too high, and that their source of error lies in the promptness with which advice is sought by women thus afflicted. It is a curious fact that one or more of these fibroids will be found not only in the majority of middle-aged colored women, but—what is rare in whites—often enough in black and mulatto girls barely over twenty years of age. Between the two races there exist other marked differences, which you will do well to remember. Thus, ovarian disease and cancerous affections of the womb are extremely rare in colored women, whilst keloid growths are common enough.

Globular in form and dense in structure, the fibroid tumor varies in size from a boy's marble to a boulder taking up more room than a child at term, and weighing 30, 40, 60, and even 100, pounds. You will find it stated that it is seldom solitary, but gregarious,—two or more being usually present. From my own observations, however, from those of Fordyce Barker (*Am. Med. Monthly*, 1857, p. 143), and also from the statistics of Mr. Pollock,—who found that, out of 39 cases, 21 had single tumors,—I am inclined to think that single and multiple tumors are about equally divided. True, an examination during life will often convey the sensation of two or more tumors; but, after death, these will usually be found to be the irregular bosses or excrescences of a parent tumor. Whenever multiple, they are, as a rule, outgrowths from the peritoneal surface of the womb; and one of them then diverts the blood to itself, and increases in bulk far more rapidly

than the other. Should two happen to start together from under the mucous lining of the womb, before long the stronger one will grow at the expense of its fellow, and may even obliterate it.

In its early history, a fibroid tumor exhibits a simple increase of nutritive activity at some point in the muscular layer of the uterine wall. To all intents, it is nothing more than an exaggerated development of unstriped muscular fibres, bound together, like those of the uterus, with connective tissue, and is in fact a *myoma*,—that is, a muscular tumor. Its histological resemblance to the womb is so striking that, even after full development, a shred taken away from it may not be distinguishable, under the microscope, from one removed from the hypertrophied but unimplicated portion of the womb. If, however, from each a slice—a topographical section, as it were—be taken, and the structure of the one as a whole be compared with that of the other, in the uterus there will be seen a significant order in the disposition of its fibres; in the tumor, a purposeless jumble. Growing by an independent proliferation of its own cells, a fibroid neither invades adjacent tissues nor becomes intimately incorporated with them, but, as it increases in bulk, simply displaces them by crowding them away on every side. The connection between it and the uterine stroma consists merely of delicate vascular filaments from its areolar capsule, which are so frail that, unless some inflammatory action has glued the tumor to its nidus, it may be shelled out as easily as a ripe orange can be peeled out from its rind.

Unlike malignant growths, fibroid tumors very rarely begin in the cervix uteri, but at some point above the os internum; nor are they found in the anterior wall so frequently as in the posterior. Their growth, being in the direction of least resistance, is determined by the stratum of uterine tissue in which they happen to start. Thus, if one has its site in the centre of the uterine wall, it will bulge as well into the uterine as into the abdominal cavity; but more into the latter, because the resistance in that direction is less. If it starts from a point nearer to the mucous lining, it will project into the uterine cavity. Should it take its origin from the muscular layer under the peritoneal investment, it will grow out of the womb into the abdominal cavity. Now, since this accident of position gives variety to the symptoms of uterine fibroids, graduates the intensity of suffering, and modifies their prognosis and treatment, it has very appropriately been chosen as the basis of their classification,—thus:

(a) *Subperitoneal, subserous, extra-uterine, or surface* fibroids are those outgrowths from the womb which project into the abdominal cavity and carry before them a fold of peritoneum.

(b) *Interstitial, parietal, intermediate, or intra-mural* fibroids denote those which are imbedded in the uterine wall and are covered on all sides by uterine tissue.

(c) *Sub-mucous, intra-uterine, or cavity* fibroids are those ingrowths into the uterine cavity which start from that stratum of uterine tissue nearest to the mucous membrane and are covered by this membrane.

The prime cause of these growths is perhaps unknown; but they undoubtedly increase under the stimulus of undue uterine congestion. Sexual intercourse always aggravates their symptoms, and marriage is pretty sure to start the growth of one hitherto dormant. Sterility is alleged to be a predisposing cause, and so is single life,—because, from this point of view, both old maids and barren wives suffer from the congestion due to uninterrupted catamenia; and the latter, in addition, from that of unfruitful sexual excitement. I am, however, bound to say that the statistics on this point have been pushed to illegitimate conclusions, as you will see from the table on this blackboard:

	Fruitful.	Sterile.	Single.	Total.
Dupuytren.....	42	12	4	58
Malgaigne.....	11	10	4	25
West.....	36	7	7	50
McClintock.....	11	10	4	25
	100	39	19	158

While willing to concede that 19 old maids to every 158 women who have reached the prime of life is a larger proportion than that deducible from our own vital statistics, I am not so sure that it is much above European averages. Again, to my thinking, this table leaves open the question whether these tumors are the cause or the effect of sterility. For, mind, the heading "Fruitful" does not indicate the condition of fecundity, but simply one in contrast with that of absolute sterility: thus, out of West's 36 cases under this heading, only 16 had more than one pregnancy. It follows, then, that it is just as reasonable to attribute sterility as infecundity to the presence of these tumors; and, as a corollary to this, that sterility is more likely to be their effect than their cause.

The proliferation of connective-tissue cells, determined by the congestions and extravasations of dysmenorrhœa, is advanced by some writers as a common cause. This opinion is strengthened by the striking fact that dysmenorrhœa is the frequent antecedent of chronic metritis, —a disease in which the structure of the thickened wall resembles so much that of a fibroid nodule that it is hardly possible to tell them apart. Further corroboration of the congestion-theory is gained by the circumstances that fibroids rarely appear before the age of thirty, and never before puberty; that the period of their greatest activity corresponds to the period of greatest menstrual activity; that after the menopause they usually cease to grow, and sometimes shrink away; and, finally, that during the catamenial flux they temporarily so increase in size as often to cause dysuria and other pelvic disturbances. Other causes of these tumors undoubtedly exist. After the stretching and weakening of uterine fibres by repeated pregnancies, these fibroids have been observed to start at points where the involution has been imperfect; and my friend Dr. Wm. F. Jenks tells me that on several occasions he has found a blood-clot to be their nucleus.

Subjective symptoms are not always evoked by the presence of a uterine fibroid, but when present are manifold, and yet not so diagnostic as to do more than arouse a suspicion, confirmable only by a physical exploration. In the usual order of their sequence, menorrhagia will first appear, or the intervals between the catamenia will shorten. Next will be added dysmenorrhœa and uterine colic; for during the menstrual flux the tumor swells up to such a bulk as to arouse the expulsive efforts of the womb. Metrorrhagia, alternated by a copious leucorrhœa, will then set in, and rapidly weaken the woman, who will now be worried by reflex uterine symptoms, such as nausea, headache, cardialgia, and palpitations. Finally, as the fibroid increases in size, there will follow a train of symptoms owing to the mechanical effects of pressure on the pelvic organs, vessels, and nerves. This consists of dysuria, vesical catarrh, difficult defecation, hemorrhoids, and of œdema, varices, and cramps of the lower extremities. The objective symptoms are far more distinctive, but, as they are modified by the site of the tumor, their consideration must be embodied in the history of each variety.

The *subperitoneal* fibroid grows more rapidly and attains a greater bulk than either of the other two varieties. Although of stone-like hardness, and nodulous, it yet begets symptoms less exacting than those of the others, and rarely destroys life. Its attachment to the uterus, at first broad and sessile, often becomes constricted and elongated into a pedicle, long enough to permit great

mobility in the cavity of the abdomen, almost independent of the movements of the uterus. Sometimes, through some rude fall or sudden succussion, the stalk snaps, and the fibroid will then roll about at large in the abdominal cavity. This severance from the womb is not followed by the death of the fibroid, for, like a loose cartilage in the knee-joint, or like a foetus escaped from the womb or from an extra-uterine cyst, it will retain its vitality indefinitely,—in one recorded case, as long as fifty years. Again, it will be found separated from the womb and attached to other organs. In such situations it is easily recognized as a parasite by its histological characters,—its uterine origin being plainly indicated by the presence of organic muscular fibre. This transplantation is brought about in two ways: By inflammation the peritoneal investment of the fibroid contracts adhesions to that of the abdominal wall, or to that of some movable viscus, as the bladder, intestines, or rectum, which, by its contractions, dilatations, or movements, so lengthens out the pedicle as to break it. Or the fibroid may glue itself to a fixed point, such as to some part of the pelvic tissues; and afterwards the condition of pregnancy or the growth of an intra-mural tumor, by causing an increase in the size of the uterus, puts the stalk to a stretch which it cannot bear. In one case, related by Simpson, the uterine contractions after labor broke the pedicle of a fibroid which had become attached to the walls of the abdomen during the last months of gestation.

If the pedicle of an extra-uterine fibroid is long and narrow, the uterus will not usually increase in size; indeed, it may take on atrophy. Upon external palpation, conjoined with a vaginal examination, there will be found in the cavity of the abdomen a movable tumor of apparently large size. But, in estimating the size of an abdominal tumor, remember that it always seems larger than it really is, because the fingers grasp not only the tumor, but also a double thickness of the abdominal walls. Due allowance must be made for this; else, the fatter the woman the larger will the tumor be deemed. A good way of estimating the amount of this error is to pinch up a fold of the abdominal wall between the thumb and forefinger, and then to subtract its thickness from the apparent diameter of the tumor. Should the displacement of the tumor communicate motion to the handle of a sound passed up to the fundus, a uterine attachment may be safely inferred. When firmly grasped, its stony hardness and the absence of any sickening pain will exclude the idea of its being an enlarged ovary. As a rule, a subperitoneal fibroid does not distress the patient by any very irksome symptoms. A pedunculated one may lodge in the retro-uterine space and give rise to much pelvic disturbance; but, before attaining any very great bulk, it will sometimes work up out of the pelvic cavity and perch on the brim. Unless, then, the rectum or bladder is inconveniently pressed upon, its discovery by the woman is almost always accidental,—often enough not until it has grown to a size double that of the fist.

This patient, S. R., thirty-five years old, has been twelve years married without ever conceiving. Although her left lung contains a large cavity, and her strength is much spent by pulmonary hemorrhages, she has, in great alarm, come a distance of over a hundred miles to consult me about an abdominal tumor, which she, by the merest chance, discovered a week ago only. Several of you examined her in my private room, and found two nodulous growths squatting upon the surface of the womb, and one tumor, as large as an orange, floating about in the abdominal cavity. The uterine cavity measures three inches, but the additional half-inch is due to the two sessile outgrowths, and not to the floating tumor, which is moored to the womb by a long and slender stalk. These facts were determined by the

extreme mobility of the tumor and by the distance to which it had to be pushed over to one side before any motion was imparted to the handle of the sound. To the gentlemen who examined her it seemed strange that neither uterine nor pelvic symptoms had been awakened by the presence of such large foreign bodies. But the truth is, that none of these tumors have crowded her pelvic organs; and, further, that her catamenia have been long suppressed by the constitutional effects of her lung-disease. On the other hand, I have hardly succeeded in convincing her that her chest-trouble is by far the more serious one; and she returns home to-day somewhat dissatisfied that my treatment is limited to arsenic, iron, and cod-liver oil.

This, gentlemen, is a very instructive case, because you will often meet with such in practice. Nothing unnerves a woman more than the discovery of a tumor in her abdomen. By sheer brooding I have seen one lady become insane, and another go into a decline. You must, however, be on your guard against imaginary tumors—phantom tumors, we call them—which women have a knack of finding in their abdomens. Whenever you are consulted for any kind of uterine fibroid, tell your patient, as I now tell this woman, that it never degenerates into cancer, and very rarely grows rapidly; that it is not an ovarian cyst, seldom proves fatal, and that, even when large, it is usually inconvenient only from its weight. Calm her fears with the hope that, after the climacteric, her tumor may shrink away, and perhaps wholly disappear. The stoppage of the menses in the woman before you will probably prevent any further increase in the bulk of her tumors; but then, on the other hand, it here imports extensive disease of the lungs. She leaves us, as you see, more light-hearted than when she first came, but still not altogether satisfied. Before another patient is admitted, let me point out to you one error in my treatment of this case: I ought to have prescribed a mental salve in the shape of some local application to the abdomen. Sick adults, like children, often need humoring; and he is often the most successful practitioner who knows when and how to humor.

When the fibroid is *interstitial*—that is, imbedded in the uterine wall—it will be attended by a hypertrophy of the whole uterus, but more especially of that portion of its muscular layer which forms the nidus. There will also be a corresponding enlargement in the uterine blood-vessels, which will sometimes emit a sound quite like the "placental bruit." The "placental bruit" of pregnancy is wrongly so called, for the sound is owing less to the circulation in the placenta than to that in the enlarged uterine vessels at its site. The louder the bruit, then, heard over a fibroid tumor, the thicker is that layer of uterine wall between it and the ear,—a fact of great importance in establishing a diagnosis. The mucous membrane becomes vividly red, and thickens, but never to the production of a decidual lining, as in intra- or extra-uterine fetations. Turgid veins traverse it, and a sanguinolent mucus bathes it. The uterine cavity, rendered tortuous and rigid by the bulging-in of a nodulous tumor, cannot usually be measured by the ordinary sound; but this flexible one of annealed silver will commonly adapt itself to the irregularities of the track and pass up to the fundus. Should you be baffled in an exploration by either of these metallic sounds, you have in reserve a plan devised by Dr. Sims: A No. 6 bougie, stiffened by its wire and slightly curved at its tip, is fairly introduced within the os uteri; in order, now, that the wire should not further advance, its ring is firmly held by one hand, whilst with the other the bougie is pushed up into the cavity. By this manœuvre the vaginal portion only of the bougie is kept stiff, whilst the uterine portion, remaining pliant, moulds itself to the distorted uterine cavity. According to the

size of the fibroid, the sound will then pass up a distance of from three to seven inches; but it should be used with great gentleness, as its passage is very likely to provoke a hemorrhage.

An interstitial fibroid may in time be forced towards either the abdominal or uterine cavity, becoming extra- or intra-uterine, as the case may be. This is brought about by the continuous peristaltic action of the uterine walls, which in health serves to clear out the mucous and menstrual secretions. In this manner also an originally submucous fibroid may be converted into a true fibroid polypus. But it is doubtful whether, as has been contended, an imbedded fibroid ever becomes polypoid in character without first losing its mucous or muscular investment,—that is to say, without the process of spontaneous enucleation. This distinction between a true and a false fibroid polypus I shall enlarge upon in a future lecture on polypi. The vitality of the interstitial fibroid is of a lower grade than that of the two other varieties; at least so it seems to me, from the way in which it behaves. It is less able to resist disturbing influences, and therefore the more frequently undergoes structural changes. It does not itself often inflame, but its serous investment is liable to attacks of inflammation, resulting sometimes in pelvic or even general peritonitis. Bearing this in mind, you will not handle them roughly, nor needlessly dilate the cervical canal with tents. In my experience, these attacks of localized peritonitis have usually taken place during or just after the flow of the menses, and I have therefore thought that they could sometimes be attributed to the escape into the peritoneal cavity of the contents of a mature Graafian follicle. For the bulk of the tumor may so disturb the relations of the pelvic organs as to make it impossible for the fimbriated extremity of the Fallopian tube to grasp the ovary.

The functions of a womb encumbered by one of these fibroids become disordered. Pregnancy rarely takes place, and, when it does, usually ends in an early abortion. This small bottle contains a three-months embryo, which was expelled last week from a womb with a large fibroid in its posterior wall. Even after a clean delivery, the oozing of blood was so alarming as to demand the use of the tampon. The cause of this abortion was probably the unequal development of the uterine walls.

The earliest and most marked disturbances produced by this kind of fibroid are, however, in the catamenia. These grow more and more abundant; they will perhaps anticipate the natural time, or become metrorrhagic. Luckily, these symptoms are not so violent as in the next variety,—the submucous. This rule is, however, not a constant one, for here is an exception to it: This patient, Mrs. S., aged forty, and the mother of six children, is almost exsanguious from a ceaseless oozing of blood, which arises, I find, from a uterine fibroid as large as a child's head. Four years ago she miscarried, with much flooding, and she has since run the gauntlet of menorrhagic and metrorrhagic attacks, whilst the womb has been slowly and steadily increasing in size. The flexible sound passes up a distance of six inches in front of the tumor, which is therefore in the posterior wall, and its passage very decidedly increases the hemorrhage. The cervix is not effaced, but abruptly projects from a stony hard body; it feels much like the nipple of a breast greatly engorged with milk. The pelvic cavity seems blocked up by a dense and immovable tumor, quite smooth in the vagina, but studded with nodules on its supra-pubic aspect. Defecation is difficult, and the efforts to empty the bladder painful and frequent. Upon auscultation, a very distinct murmur is audible over the whole uterine body. The length of the cervix, the great size of the tumor, and the bosses on its abdominal surface lead me to think



that it is an interstitial fibroid, although the excessive catamenial flows and the intercurrent hemorrhages point rather to a submucous fibroid. To arrive at a correct diagnosis, and also to lessen the waste of blood, I shall dilate the cervical canal with sponge tents.\*

When the fibroid is *submucous*, the uterus enlarges as in pregnancy; the cervix becomes shortened and oftentimes effaced; whilst the os is likely to be found ring-like and patulous. Prominent among the symptoms will be pelvic pains and uterine colic. The functional disturbances will be greater, and the local congestion more intense, than in the preceding variety. Hemorrhage, and that in excess, will rarely be absent. The sound will penetrate to a depth greater, in proportion to the size of the tumor, than in the interstitial. In short, all its symptoms are commonly more exacting and more marked than those of the other two. But no great stress must be laid on their intensity as a means of diagnosis, for this relation does not always hold good. In fact, I have seen interstitial fibroids exhibit very urgent symptoms, whilst those of a submucous growth have been hardly appreciable.

(To be continued.)

## ORIGINAL COMMUNICATIONS.

### DEATH FROM ACCIDENTAL POISONING BY CARBOLIC ACID.

BY W. E. TAYLOR,  
Surgeon, U.S. Navy.

U.S. FLAG-SHIP PENSACOLA (second-rate),  
PANAMA, February 23, 1872.

THE following is a correct account of the affair, as far as can be ascertained.

T. R., nurse; aged 23 years; native of Ireland.

About 4.50 o'clock this P.M., the apothecary, Charles O'Hanlon, and T. R. were engaged in arranging the medicines on one of the shelves in the locker in the dispensary of this ship. The apothecary turned towards the door to speak to one of the men, and, while speaking, his back was towards T. R., who continued his work. The apothecary states that his back was not turned longer than ten seconds, when, hearing an unusual noise behind, he turned immediately, and, seeing T. R. in the act of falling, he caught him, laid him down, and sent at once for assistance. Dr. Flint and myself were in the sick-bay; we repaired immediately to the dispensary, seeing the patient within one, or certainly two, minutes after the occurrence. He was then totally insensible; pulseless; pupils dilated; face pallid and pinched; the respiration was of a gasping character, and there had been an involuntary discharge of urine. The interval between the respiratory acts became longer, and, after one or two partial efforts, life ceased; respiration continuing for several seconds after the cardiac impulse ceased to be perceptible.

There were no convulsions nor vomiting; nothing beyond the condition above described. The fatal event occurred so rapidly that there was not sufficient time for the manifestation of any further symptoms, nor was there an opportunity for the exhibition of any remedial measures. Death took place in about three minutes from the time the apothecary heard the first noise.

There was a strong odor of carbolie acid in his breath, but no trace of it about his lips or face. Upon examining

the medicines on the shelf, a bottle of the capacity of one pint, and about two-thirds full of "acid carbolie impure," as furnished from the U.S. Naval Laboratory at New York, was found without the cork in it. As no one saw him drink anything, and as he did not speak or show any signs of consciousness, the inference was that, the moment the apothecary turned away, he hurriedly took up the bottle and swallowed some of its contents by mistake for some stimulant.

He was in the habit of drinking whenever an opportunity occurred, and on this account was never allowed to dispense liquor.

This supposition of the accidental origin of the poisoning was strengthened by the fact that a bottle of the same size, containing tincture of ginger, was found standing close to the carbolie acid; and as the allowance of tincture of ginger had been nearly used, and could not be accounted for in a legitimate way, it is more than likely that he had been in the habit of using it, and intended doing so upon this occasion.

It was impossible to ascertain the exact quantity swallowed, but, from the manner in which it was done, it is not likely that more than one ounce was taken. The body was allowed to remain undisturbed during the night,—a small quantity of ice being placed on the abdomen.

February 24, 1872.—Post-mortem examination was made this morning at six o'clock, thirteen hours after death. Rigor mortis well marked. Body well nourished; skin pallid, with some post-mortem discoloration about the shoulders, back, and hips. No evidence of commencing decomposition.

Owing to the inconvenience attending such examinations on board ship,—although every facility was afforded me,—it was decided to examine only the stomach and brain.

Upon opening the abdomen, the odor of carbolie acid was very perceptible; the viscera were in a good state of preservation. The stomach was moderately distended, and intensely congested externally, being of a dark venous hue. It was removed entire, after ligating its cardiac and pyloric extremities. Upon being opened, it was found to contain about one pint of a whitish-colored liquid smelling strongly of carbolie acid, and some undigested food having also the same odor. After removing the contents, the whole of the mucous lining gave positive evidence of the corrosive effects of the poison,—showing the characteristic white appearance seen after the local application of the undilute acid. Beneath this white film the mucous membrane was intensely congested, of a chocolate color, strongly corrugated,—thicker, tougher, and much more rigid, than normal. This condition was especially well marked in the cardiac extremity and along the greater curvature, and also in the lower end of the œsophagus, and in a less degree along the lesser curvature and at the pyloric extremity, although no part of the internal surface of the viscus had entirely escaped.

The skull was opened in the usual manner. The scalp and the meninges of the brain were very much congested, the vessels being filled with fluid blood of a dark color. There was no effusion of blood or serum either beneath the membranes or in the ventricles; and, with the exception of a very few bloody points of small size in the cerebrum, and some injection of the choroid plexus, the remainder of the cranial contents seemed to be in a normal condition.

The most marked feature in this case was the rapidly-fatal result. It might almost be termed instantaneous, as, from the most careful estimate, not more than *three minutes* could have elapsed from the swallowing of the acid until death ensued. I know of scarcely any poison capable of producing death in so short a time, except, possibly, strong hydrocyanic acid,—the symptoms from

\* This was accordingly done at her house a week later, and the growth found to be interstitial. Very unfortunately, the process of dilatation lighted up a peritonitis, from which she died on the eighth day.

poisoning by which, I may add, closely resemble those noticed in this case.

Having advanced thus far in the history of this interesting case, it may be well to inquire, and, if possible, to form some idea of the mode by which carbolic acid is capable of destroying life so rapidly.

Two modes have suggested themselves,—viz.: 1. By its powerful irritant effect, applied, as in this case, instantaneously to the whole lining membrane of the stomach and œsophagus,—thereby causing "death from shock" in the same manner as a blow upon the epigastrium; or,

2. After absorption, by its anæsthetic and paralyzing effect upon the sympathetic and pneumogastric nerves and their connections, thereby suspending or destroying their vital action, and bringing about cessation of function in important organs supplied by them,—as the brain, heart, and lungs.

It is a well-established fact that concentrated carbolic acid, when applied to the skin, produces decided anæsthesia in a very short time. Dr. W. H. Jones, U.S.N., now attached to this ship, has upon several occasions applied the acid to the skin of his forearm, with the effect of lessening its sensibility, in about twenty seconds, to such an extent as to allow the part to be freely incised without pain.

It has been used upon several occasions, on board this ship, to mitigate pain in opening buboes, etc., and always with good effect; and, if it causes anæsthesia when applied externally, there is no reason why the same effect should not be produced when it is applied internally; it therefore seems reasonable to suppose that the rapidly-fatal effect of carbolic acid in this case can be accounted for in a satisfactory manner by its anæsthetic and paralyzing effect upon the great nervous centres following its immediate absorption from the stomach.

Had life been prolonged, or the dose been smaller, there is no doubt but that vomiting, purging, and other evidences of its action as an irritant poison would have been observed; but, as death occurred too rapidly to be attributed to its irritant or corrosive effects, it becomes necessary to look farther for a solution of the problem; and it seems rational to suppose that the solution of the *modus operandi* of an immediately-fatal dose of carbolic acid has been given in a satisfactory manner in the second proposition.

## NOTES OF HOSPITAL PRACTICE.

### JEFFERSON MEDICAL COLLEGE.

CLINIC OF PROF. JOS. PANCOAST.

Reported by FRANK WOODBURY.

#### NEW OPERATION FOR THE RELIEF OF PERSISTENT FACIAL NEURALGIA.

CASE.—Mr. B. F. A., of Bangor, Me., presented himself at the clinic January 3, 1872, seeking relief from facial neuralgia in its severest form,—*tic douloureux*,—which had tortured him for the past seven years. He stated that he had suffered to such an extent that he would rather die than live any longer in such misery, and was anxious to have any operation done that would afford him relief, without regard to its risk or severity, so that it removed the pain. He is seventy-two years of age; in frame slight and wiry; rather below the average height, and, though apparently not enfeebled by age, has a haggard expression on his countenance from loss of rest and constant suffering.

The pain he describes as intense, accompanied by spasmodic twitchings (*tic*) of the muscles on the left side of the face. It extends from the body of the lower jaw, to the cheek, border of the tongue, and up along the temple, without passing over

the median line of the forehead. It is not constant; coming on in paroxysms, worse at one time than another; generally commencing with a pricking sensation, and is brought on by trifling causes, such as a draught of air or the slightest puff of wind on his face, and at times when he simply opens his mouth to speak. Sometimes a month will pass without an attack; and at other times the pain is so constant as to prevent his sleeping, as he says, "a half-hour in a whole week." He thinks it is worse in wet or changing weather, and on rising in the morning. Frequently, on attempting to eat, the pain will come on,—severely at first, and afterwards decrease in severity while he is eating. All the teeth have been extracted on that side of his mouth to relieve the pain, but without result. He tried electricity last summer, with but transient, if any, relief.

The lecturer observed, "The pains seem to be exclusively limited to the third division of the fifth pair of nerves in this case, as we ascertain by tracing out the lines of painful coruscation. Their starting-points are the gum of the lower jaw on the left side, and the corresponding sides of the cheek and tongue. The pains which shoot up the temple along the auriculo-temporal nerve, show that the third division of the fifth pair is involved, in all its branches, as far up as the foramen ovale, by which the nerve emerges from the skull. I have not seen it exist in all of the branches of this nerve (the fifth pair) except in a few instances. One was the case of a lady from Kensington, who, we afterwards ascertained, had a malignant tumor developed in the sphenoidal sinuses, which by softening and expanding the wall of one side, and impinging on the Casserian ganglion, affected all three divisions of the nerve simultaneously. The first or ophthalmic branch of the fifth pair is usually affected alone in neuralgia.

"We often also see the second or supermaxillary branch alone affected, as manifested by pains at the infra-orbital foramen and in the upper jaw, cheek, or gums. A diseased dental pulp is the most common cause of the disease in either jaw. And yet, when the tooth has been drawn, and sometimes after the extraction of the whole set on that side, the nerve will still be in some unnatural condition in the maxillary canal or some other part of its course, so as to keep up the neuralgic pains. It would seem that the investing sheath or neurilemma of the nerve was capable of extending this morbid condition up to the cranial foramina alone; whilst in others it must reach the Casserian ganglion or the cerebro-spinal origin, in order to produce the reflex nervous pains.

"It is quite usual to find the second and third branches of the fifth pair conjointly affected in the same person, as was the case in three individuals upon whom I performed, with entire success, the operation I propose to do to-day. I think it not improbable that the explanation of this is to be found in the close proximity of the two foramina (ovale and rotundum) by which the nerves emerge; while the first or ophthalmic branch enters loosely into the orbit by the sphenoidal fissure, and only at the supra-orbital notch or foramen has its neurilemmatic investment brought into immediate connection with the periosteum lining the place of its passage in the bone. As a general rule, it is at the points where the nerves pass through bones, or are brought in contact with the periosteal or other fibrous tissue, that we find the painful points in neuralgia. I am the more confirmed in this view from the fact that in almost every case where I have cut the supra-orbital nerve for frontal neuralgia, I have found the nerve divided and passing through several small foramina in the bone, instead of a single hole or notch in the orbital arch, as is usually the case. I have likewise observed the same thing in two of my resections of the inferior maxillary nerve,—viz., that the nerve had some of its smaller branches passing by minute orifices in the bone, just at the margin of the foramen ovale; thus leaving the neurilemma of the nerve, from this unusual division, more liable to be affected by the morbid condition of the fibrous tissues,—syphilitic, rheumatic, or simply inflammatory, as the case may be.

"Had the pain in the instance before us extended to both the other divisions (the first and second) of the fifth pair, the prognosis would have been less favorable, as we would have been justified in suspecting the existence of some morbid growth, either from the walls of the cavity of the sphenoid bone or from the meninges, pressing upon or disturbing the encephalic por-

tion of the nerve. In some cases it may, however, depend solely upon a general morbid condition of the periosteum. When facial neuralgia is accompanied by spasmodic twitchings of the affected parts, it is popularly called 'tic douloureux;' and in the worst cases these twitchings are accompanied by some flushing of the face. In former times they used to cut the ramifications of the facial nerve (portio dura) on the same side of the face for this affection, because the muscles supplied by this nerve were thrown into spasmodic action. This operation paralyzed the muscles without relieving the pain, and is no longer practised.

"If the pain is limited to the anterior portion of the inferior dental nerve, as we might infer from the fact of its not being habitually reflected along the branches of the main trunk which come off near the foramen, we can sometimes effect a cure by trephining the ramus of the jaw-bone and cutting away half an inch of the nerve. If we should content ourselves, however, with merely dividing the nerve, the operation would fail from the speedy reunion of the nerve-trunk; as the cicatrix in a nerve left after operation, if less than a quarter of an inch long, offers but little obstacle to the passage of the nerve-fluid. Pain, as has been observed, may continue even after the aching tooth that has excited it, and even all on the same side, have been drawn; for the nerve-filament leading to it remains in the bottom of the socket, where pressure may be made upon it by some deposit from the lining membrane of the canal, or from neurilemmatic inflammation, and so keep up the neuralgic suffering unabated,—excitable even by any friction on the toothless gum itself. In such cases the operation just mentioned will ordinarily afford relief. But where for a long time the muscles of mastication have been involved, with pain in the cheek, lower lip, and temple, we must have recourse to excision of the third branch, high up. Even where the buccinator nerve seemed to be the only one affected, I have seldom been able to give more than temporary relief by the excision of a portion of that trunk alone. The place I select for the excision of the trunk and branches of this nerve is at the point where the nerve emerges from the cranium through the foramen ovale and begins at once to distribute its branches. The process by which I reach it enables me also to excise a portion of the trunk of the second branch when its ramifications are involved in the neuralgic suffering. This operation I have performed in three previous cases. In the first instance (in June, 1860), I was led to undertake it in the case of a patient under my charge at the Pennsylvania Hospital. This man was not only affected, like the patient before us, with tic douloureux of the inferior maxillary nerve, but suffered to an equal extent in all the branches of the second division of the fifth pair, or upper maxillary nerve. He had been a sufferer for fifteen years. He had been in good hands, and almost every remedial measure had been tried in vain, even to division of the branches of the portio dura nerve. Every tooth in both jaws had been pulled, years before. The pains seemed to concentrate more particularly in the buccinator nerve. Hoping that the excision of this nerve might afford some relief,—as any rough friction on the parts to which it was distributed excited pain and spasms,—I opened the cheek and took away half an inch of its trunk, but without any good result. I then dismissed the case from the hospital. Some time afterwards he stopped my carriage in the street, and threatened to commit suicide if I would not undertake some operation that might relieve him of his incessant agonies. I had before thought of this new process of operation which I shall show you to-day; but it was untried, and I put its consideration aside as being too hazardous. On account of his importunities and my great compassion for his sufferings, I sent him back to the hospital, and performed the operation the next day, which resulted in his immediate relief; placing him, as he said, in comparison with his former state, in perfect elysium. Since then I have repeated the operation upon one woman and upon another man, with entire success in all the cases, so far as my knowledge extends; that of the woman, whom some of the class recollect seeing me operate upon in this place last winter, being the most difficult, on account of the narrower facial spaces met with when I came to excise the trunk of the second branch in the pterygo-maxillary fissure, which forced me to crush in a little the posterior wall of the antrum.

"Before operating on this patient we will give him a few

days' rest in the hospital, and endeavor to prepare him for the operation. To relieve pain in the interval, he can use this potent antidyneous ointment:

"℞ Morph. acetat., gr. iij,  
Atropiæ,  
Aconitiæ, ʒā gr. i,  
Veratriæ, gr. viij,  
Adipis, ʒi. Misce.

"About a twelfth of a teaspoonful to be rubbed over the seat of pain several times a day.

"In ordinary cases it would be better to leave out the atropia, to avoid dilatation of the pupil."

January 6.—The patient was brought in and the operation performed, as follows. After he was well under the influence of the ether, Prof. Pancoast made a trap-door incision through the skin and subcutaneous cellular tissue,—in front of the parotid gland, above the duct of Steno,—and down to the bone immediately over the coronoid process and ramus of the lower jaw, uniting them by a cross-cut of equal depth on the ramus, as shown in the figure: \* in which, however, the vertical lines are sloped too much forward at their upper extremities. The



flap, including the masseter muscle, was then dissected loose from the bone, and turned up. The tendon of the temporal muscle was cut loose from the point of the coronoid process and pushed up under the zygoma. The coronoid process was then sawed off at its junction with the ramus, and taken away. The great space leading to the sphenomaxillary fossa, filled with cellular tissue and vessels, was now exposed. The forefinger was passed down deeply to break up the structure and isolate the trunk of the internal maxillary artery, which was raised on an aneurismal needle and tied; one or two of its muscular branches having been first secured as they were divided. By further breaking away the cellular structure with the finger, and using pledgets of lint dipped in aqua Pagliari (solution of benzoate of alum) as a styptic, the origin of the external pterygoid muscle from the great wing of the sphenoid bone, was brought into view. This head of the muscle was detached from the bone, partly with the finger-nail and the aid of the handle of the scalpel, and partly with a Cooper's bistoury, leaving the trunk of the inferior maxillary nerve exposed to view as it came out from the foramen ovale,—the divided head of the pterygoid being pushed out of the way. The wound being again well dried with the styptic, the various branches into which the nerve divides were visible, and were taken up one by one with curved forceps, and half an inch or more cut out of each with curved scissors, close to the foramen. After all that could be seen were removed, the knife was passed around the margin of the foramen in order to divide any branches that might come out by small foramina at its side, as the surgeon had noticed to be the case in his previous operations. A little more bleeding than usual now taking place, Dr. Pancoast used his soap-styptic in place of the benzoate, as being more potent, and yet not so destructive to the tissues as the solution of Monsel (sulphate of iron). This styptic is made as follows:

\* Taken from the forthcoming edition of Gross's Surgery.



R Alcohol. fort., ℥iij,  
Potasse carbonat., ℥ij,  
Sapon. castil., ℥i. Misce.

During the operation scarcely two ounces of blood were lost. The flap was brought down, and the wound closed with silk sutures and dressed with a greased compress and bandage.

The lecturer remarked, "This concludes the operation on this patient; but if he had had, as in the other cases I have referred to, the second branch of the fifth pair involved, I should proceed at once from the bottom of this wound, as I did with them, to make exsection of the root of that trunk in the following manner: The finger-nail, pushed up from the top of this wound, comes readily into the narrow pterygo-maxillary fissure, which the nerve crosses. This narrow steel rod, such as was formerly used to carry a needle-point in staphyloraphy, is turned into nearly a semicircle at its end, upon which a notch is filed to carry a very fine silk thread securely fastened upon it. This fine thread is tied at its other end to a strong ligature-thread. The object is to carry the fine thread around the trunk of the nerve, and let it draw the stronger one after it. It is done in this way: The handle of the steel rod is elevated; the other blunt curved end, carrying the fine thread, is entered at the bottom of the pterygo-maxillary fissure till it comes against the sheath of the external rectus muscle of the eye, which will be made known by the motion it gives to the ball. Then, by depressing the handle, the curved end of the rod will move round the trunk of the nerve and come out above it. From the end of this, which can be partly seen and partly felt, the fine thread can be drawn forwards with a delicate blunt hook. The fine thread is then made to pull the strong ligature after it, which will be round the trunk of the nerve. The strong thread is then tied with a firm knot down upon the nerve, and serves as a handle to it. This is now to be drawn towards the front, and Civalle's urethrotome or a delicate probe-pointed bistoury passed up behind it, so as to shave off the nerve from the side of the foramen rotundum. Then, pulling strongly upon the ligature in the backward direction, so as to make the divided front section of the nerve recede, the same instrument is passed up to shave it off on the side of the pterygoid process. The ligature then comes away, bringing with it at least a quarter of an inch of the trunk of the nerve in its grasp." In two of the three operations which he had done, the lecturer believed Meckel's ganglion was included in the section removed. This operation, in his hands, has sufficed to give perfect relief from the neuralgia in the branches of this nerve, and, so far as he yet knows, the relief has been permanent. "But if it was desirable to give greater security against the return of the neuralgia, an opening might be made over the infra-orbital foramen, and the divided trunk pulled outwards and removed, as recommended by Professor Langenbeck of Berlin. The simple division without exsection of the nerve in the pterygo-maxillary fissure, would probably suffice, with this additional operation. For twenty years past I have thus pulled out the supra-orbital nerve and detached it from the skin of the forehead, in cases of frontal neuralgia, where I have cut it just within the orbit."

*January 10.*—Patient brought before the class to-day. He has not had a neuralgic pain since the operation, and says that he would be willing to undergo two such operations, if necessary, in order to secure the relief he now enjoys. Professor Pancoast is sanguine, judging from the results in the previous cases, that the man is permanently relieved. There was considerable leaking from the wound after the operation,—in this case more than usual. The stitches were removed to-day, and the wound dressed with the carbolated oxide of zinc ointment (acid. carbolic. gr. x; ung. zinci oxid., ℥ij).

An attempt was made to show the class that the gustatory branch of the fifth pair was paralyzed, by means of alternate applications of salt and sugar; but the patient grew faint, and the test was postponed. On a subsequent occasion it was found that the special sense of taste was entirely deficient on the left side and point of the tongue, as was to be expected.

*January 13.*—The patient was again presented. He has no difficulty in mastication, as the nerves and muscles which perform that office are undisturbed on the opposite side; and no one uses habitually more than one side of the mouth in chewing his food. He cannot feel the point of a toilet-pin pressed on the left side of the tongue or on the cheek,—show-

ing that tactile sensibility on that side is destroyed. He has not suffered a particle of neuralgic pain since the operation, which was followed by considerable suppuration, lasting ten days, and which came from the bottom of the wound.

At the close of February he returned to his home, perfectly relieved.

#### CASE OF ACRODYNIA, OR NEURALGIA AT THE POINT OF THE FINGER.

This was the case of a boy aged eighteen, whose finger had, some weeks before, been crushed in a cog-wheel. The wound had entirely healed, but the cicatrix was so extremely sensitive that he was unable to work,—any accidental touch of it giving intense pain, which shot up along his arm.

This, Professor Pancoast remarked, was caused by some filaments of the highly-sensitive digital nerve having been contused or torn by the accident, and become subsequently involved in the cicatrix; it may be that some of the Pacinian bodies which are so numerous on this nerve have been implicated. The affection is limited to one small point of pain. The same effect is sometimes seen in sewing-women, who have punctured the pulpy end of the finger with a needle so fine as scarcely to leave a mark, the slight wound giving such trouble as to render the hand almost useless for months. The only remedy in such cases is excision of the affected part of the nerve. There are strange tumors, called painful tubercles, sometimes met with in the sensitive cutaneous nerves of the leg and arm, in size varying from a pea to a hickory-nut. They seem to be developed in the centre of the nervous trunk, and have its filaments spread over them; and are so extremely sensitive that a rude touch will frequently give rise to the epileptic aura, followed by fits. They are of such peculiar consistence—resembling fibro-cartilage—that after removal they will rebound, when thrown against a hard substance, like a ball made from the elastic cartilage at the end of a surgeon's nose. These also, with the nerves to which they are attached, must be excised as the only means of relief.

Ether was administered, and the cicatrix, with a piece of the nerve, removed. The patient returned a week afterwards, and reported himself entirely relieved.

In connection with the subject of imprisonment and injury of nerves by the contraction of cicatrices, the lecturer referred to the case of Col. Kennedy Blood, of Brookville, in this State. He had suffered from necrosis of the lower end of the thigh-bone, from which, after some years of suffering, the dead fragments of bone were removed through an opening in the soft parts upon the inner side of the limb, near the condyle. After the wound cicatrized, pain was felt from the region of the hip, down the leg to the foot. In the course of some months this became unendurable, and his health gave way from the constant pain and the loss of rest it occasioned; no therapeutic measures affording him any relief. "In this condition he came to me with the fixed resolution of having his thigh amputated, and not to listen to any other mode of treatment. After a careful examination, I came to the conclusion that the bone had become sound, and that all the trouble arose from the imprisonment of the trunk of the long saphenous nerve in the cicatrix, pressure upon which developed lines of pain, which could be traced along the branches of the nerve to the foot; at the same time there was, by reflex sympathy, excessive neuralgic pain felt throughout the whole region of the hip on that side. This pain in the hip had been for some months very severe, and was one of his reasons for insisting upon amputation. I came to the conclusion that if the trunks of the nerves involved in the cicatrix could be removed, not only the direct but all the reflex neuralgia would be relieved, and the limb saved.

"Of course, then, I would not amputate; so we compromised: I was to try my measures, and if they failed it would then be time enough to consider the practicability of a more serious operation.

"I opened the cicatrix freely, and fell upon the trunk of the saphenous and some other nervous branches above the site of the old wound. The branches seemed unusually numerous, in consequence of their all being double the natural size,—owing, probably, to thickening of their neurilemmæ. Cutting all these trunks off above, I detached them from the cicatrix that had bound them down tightly to the bone, which, being exposed by the operation, was found to be in good condition.

The wound healed kindly, and from that day to this he has been entirely without neuralgia in leg, foot, or hip; and, except a little numbness in the part from which I had cut off the nervous supply, he has a strong and useful limb. In fact, he leads an active life, and is a great still-hunter of the deer, and every year sends me one of his own killing."

*OPERATION UPON A LARGE ANEURISM BY ANASTOMOSIS (TÉLANGECTASIS OF GRAEFE: ANGIOMA OF VIRCHOW).*

*Case.*—Mary H., a plump infant two months old, was brought before the clinic February 21, exhibiting two large arterial tumors on the face, which the mother stated had been steadily increasing in size since the birth of the child. One of these tumors, which was seated in part over the parotid gland, measured two inches and a half in length by two in breadth, involving the greater part of the cheek on the left side; the other, the larger of the two, was situated under the chin, ovoid in shape, and fully three inches in its longest diameter. These tumors were quite small at the birth of the child; and they now present well-marked illustrations of true *nævi materni* in a developed stage. They were of a crimson hue, with an irregular but clearly-defined outline, not symmetrical in shape, and projected above the level of the surrounding skin. They were compressible and soft, and gave a perceptible arterial impulse to the touch; and when the child cried there was a sensible increase in the volume of the tumor.

The lecturer remarked that he had not this winter seen a better-marked case of *nævus* than the one then before the class. "Generally these tumors are of small size, existing at birth as a small red speck; in rare cases the size of a dime, or even larger,—having, perhaps, already made some considerable progress in utero. Their subsequent growth, in some instances, is so slow as to require months, or even years, to attain much size; while in other cases, as the one before us, their development is very rapid.

"These affections were well described by Petit, who called them '*loupes variqueuses*.' Subsequently they were still more carefully discussed by John Bell, of Edinburgh, who described them as being essentially vascular tumors, formed by the enlargement and hypertrophy of the capillaries at the seat of the disease, and hence were called by him '*aneurisms by anastomosis*.' By the dilatation of the cavities and thickening of the coats of the vessels a sort of erectile tissue is formed, somewhat like that of the corpus spongiosum urethrae; and for this reason they are frequently described as erectile tumors. Their common seat is in the under surface, or vascular layer, of the skin; sometimes, however, they are entirely subcutaneous,—often involving masses of fat, the superficial lymphatic glands, and even the periosteum of the bone itself. A violent contusion of a part, it is said, may produce these affections by causing the minute capillary vessels to take on the strange pathological habit of lengthening and dilatation, so common with the larger arteries and veins. But this is not a common cause. The increase in size in these tumors does not depend upon the development of new vessels, but upon involving in the same morbid condition those immediately about them which were previously healthy. Sometimes the arterial trunks leading to them become, by sympathy, enlarged and tortuous, and coil themselves about. The tumor thus formed is called a *circoid aneurism*.

"Commencing soft vascular cancer of the glands, especially the parotid, is sometimes mistaken for this affection.

"After remaining quiescent for some time, these *nævi* may, from some exciting cause, take on sudden and alarming increase in size. From the thinness of the investments, some of the capillary vessels which have undergone unusual development will sometimes present the appearance of little cysts, which have a bluish look through the attenuated skin. These, it was formerly thought, were cases in which the venous capillary vessels were particularly expanded. But when we remove them by operation, the blood is of the same arterial hue in all; the bluish appearance being, in all probability, due to the refraction of light by the thinned, semi-transparent skin. Ulceration may take place, leading to sloughing, and cause serious hemorrhage. Writers speak of these tumors growing so large as, when injured by a knock or ruptured in any way, to give rise to fatal hemorrhage. Such an event may happen. I have seen troublesome bleeding in such cases, but it is very

rare. When a tumor of this kind begins to grow, it calls for surgical interference. If it is the mere speck or pin-point aneurism that begins to throw out its branching vessels, a pin may be introduced under it, and the central point strangulated with a ligature, with the certainty of a cure. The central activity of the vessels is here seen involving the surrounding part, which will be prevented when the focus, or central vasomotor force, is destroyed.

"Large aneurismal tumors of the bluish cast, so common on the cheeks of children, require a different treatment. I am in the habit, as many of the class have seen, both this session and the last, of splitting them open from base to top with a curved bistoury, and rapidly tearing out all the abnormal spongy structure with my thumb and finger, aided sometimes with a pair of forceps and sometimes with a few touches of the knife, and then plugging the wound at once with lint dipped in the benzoate of alum styptic. Before using the bistoury I pass two or three acupressure-needles under the integuments, just outside of the tumor, and make temporary compression of the vessels leading to the aneurism, with a temporary thread or wire thrown over the needles and pretty tightly drawn. In this way little blood is lost and all the skin preserved; consequently, but little deformity will follow.

"The manner of growth of these aneurisms by anastomosis will sometimes lead indirectly to their own cure. It is well in some cases that this does occur, for occasionally we have these tumors formed in parts, as about the orbit, where we dare not operate upon them directly, and when even the ligation of both external carotid arteries has been without success. Yet, in several such cases that have come under my observation, a spontaneous cure has taken place. The *rationale* of the cure seems to be as follows: some of these little vessels, dilated into globular cysts, may have the blood coagulate in them, forming a sort of embolismus; or the smaller arteries, in the same manner as larger ones, form, on their interior surface, layers of stratified fibrin; fibrous deposits at the same time taking place in the intervascular connective tissue, so as to exert a sort of confining, strangulating influence on the mass. Though this we know does occasionally take place, yet we cannot rely upon it in ordinary cases.

"The common way of treating these tumors is by the process of strangulation, when the medium size of the tumor and its location will admit of it. Excision is better yet when the tumor is seated over a hard surface like the bones of the cranium, so that we can make pressure to stop bleeding. It leaves, if the lips of the wound are kept well together, a less deforming cicatrix than strangulation.

"A small *nævus*, before a child has been vaccinated, may be cured by vaccinating on its surface. The same result may be attained by anything that destroys the tissue, as a hot iron, or one of the common caustics. Injections of solutions of iodine or perchloride of iron were, until recently, much in vogue. But they are somewhat uncertain in their effect, and not without danger, from the risk of their getting into the circulation and producing emboli in distant parts.

"The larger arteries which send branches to the part have been tied, with the hope of cutting off the supply of blood, and thus starving the tumor. The freedom of anastomosis is, however, so great about these tumors as to make this uncertain in its effects; yet it is used as a last resort when other means of cure are inapplicable, or the tumor involves parts—as the orbit, nose, mouth, or ear—in which the immediate destructive measures are inadmissible. However, where strangulation can be performed, it is reliable and very certain in its results. If the tumor is of moderate size, pass pins beneath it, including a little of the healthy tissues just beyond the base. Use one, two, or more pins, according to the size of the tumor, and tie a thread under them as firmly as possible; cut off the points to prevent the child from wounding itself, and allow the pins to remain until the slough comes away. In cutting off the ends of the pins, care must be taken to cover the child's eyes, to prevent the pieces from flying into them."

The lecturer proceeded to ligate one of the tumors, and stated that he would defer operation on the other until the first was well. This tumor was so large that three pins, and as many ligatures, were required. Ether was then administered. Three pins were inserted under the tumor, bunching it up, and three darning-needles (the round points of which would not cut



the vessels), carrying double threads, were passed at right angles to these. The needles were cut loose and some of the ends of the threads tied together, after the manner of Liston, so as to make three separate ligatures, which were firmly tied, strangulating the whole of the diseased structure. If, after the effects of the anæsthetic had passed away, the child appeared to suffer much pain, twenty-five drops of paregoric were to be administered. Pieces of adhesive plaster were placed under the ends of the pins, and carbolated oxide of zinc ointment applied on lint and retained by adhesive strips.

*February 24.*—The child was brought into the clinic-room showing a healthy sore, with the slough separating nicely. Same application continued.

*February 28.*—The patient again presented. The slough has entirely come away, leaving a healthy granulating wound. As soon as this is quite healed, the same operation may be repeated on the remaining tumor, or we may effect the obliteration of the vessels by a darning process,—passing, in various directions through the mass, double threads of the saddler's sewing-silk, which have been soaked in saturated solution of chloride of zinc, and afterwards dried. These threads are allowed to remain, and should be very numerous. Two pins should be inserted, and a ligature thrown around the base, so as to mass the vessels together when the case will admit of it. The zinc coagulates the blood, and a suppurative tract is formed about each thread. Prof. Pancoast has in this way effected cures of naevi on the eyelids and eyebrows. It is a tedious process, but gives a better result than the introduction of white-hot needles, which is sometimes practised,—but with little effect, however, as the blood cools them so quickly.

The accompanying figure\* represents one of two cases



brought before the class and operated on. In both there was an immense tumor formed by aneurism of anastomosis.

One of these—in an adult black, as seen by the figure—was limited to the upper lip, and the tumor was so large that it had to be lifted up when he took his food. The vessels in it were greatly dilated, and it was so completely spongy that the blood could all be forced out of it by pressure. An acupressure-needle was passed from side to side through the base of the lip, and a temporary wire ligature thrown over it and drawn sufficiently tight to cut off the circulation in a great measure and confine the accumulated blood in the tumor. The mucous membrane and skin were then dissected up, and turned back for about half an inch along the margin of the tumor. This incision was deepened at one end, so as to get hold of the spongy mass, which was torn away with the forceps, aided by frequent

touches with the knife. A good part of the orbicular muscle was taken away, for its vessels formed part of the tumor. Then powdered chloride of zinc was rubbed with the finger into the wound, in order to coagulate the blood in such portions of the spongy mass as might remain, as well as to alter its structure. Pledgets of lint were next introduced into the cavity, and the flaps of skin and mucous membrane reconnected by the aid of a few ligatures, restoring to the lip its natural shape. Very little blood was lost. The temporary ligature was left in place for three days. The directions given were for the assistants to watch the lip, and to loosen the wire ligature in case the lip lost its temperature, but not to take it away altogether until it could be done without reproducing bleeding. The consequence was a very satisfactory cure in about ten days.

In the other case referred to, the aneurism involved the commissure of the mouth, with about a third of the adjoining structure of each lip. Two acupressure-needles were introduced,—one from the base of each lip,—and the points made to cross on the cheek, so that the temporary wire ligatures were enabled to control the circulation. The spongy structure was removed from both lips and from the commissure, in the manner above described; the after-treatment being the same. A good cure followed in this, as in the other case, with but little deformity. In both instances the gums were red, from the dilatation of their capillaries. But these vessels, after the removal of the main tumors, have shown no tendency to further enlargement.

#### OPERATION FOR HARE-LIP.

Hannah K., aged four months, was presented at the clinic January 10, with a congenital cleft in the upper lip: triangular in shape, gaping below, and with its apex running into the nostril in immediate conjunction with the sesamoid cartilage.

In proceeding to operate, the lecturer remarked that this affection was an arrest of development peculiar to the part, never seen in the lower lip. When there are two fissures, one on each side, it is called double hare-lip, and each fissure is apparently opposite the place for the canine teeth,—leaving the incisor teeth, when they come through, in a tubercle by themselves, continuous chiefly with the septum narium. This included space covers the site of the intermaxillary bones, each of which, at a very early period of foetal life, should become consolidated with, and make a part of, its adjoining maxillary bone. A defect in this process of consolidation seems to be the cause of hare-lip. Even when the gap only is left in the lip, a notch will often be seen at the place of bony union, as is the case in the present instance. This congenital fissure sometimes runs through both hard and soft palate.

The habit of the lecturer is to operate on single hare-lip within the month, and on double, in the third or fourth month. It is desirable to do it before the teeth are cut, which, if the operation is not done early, are apt to come out irregular. When the fissure runs through the palate, he also operates early, as it seems to induce the bones of the two sides to approach each other, and leave a smaller gap for staphyloplasty or uranoplasty afterwards, when the child has partly grown up. There is little to be said about the common operation for hare-lip. The edges of the gap must be pared freely, so as to make two concave or angular raw surfaces facing each other. This is to give increased length, and render the lip, after union, prominent and full in its middle part, as it naturally should be. Whether this is done with the sharp-pointed bistoury, or curved scissors after the manner of Benjamin Bell, makes little difference. If the lip is narrow, the lecturer prefers the bistoury, and leaves the base of the turned-down segment adherent; which, after being sufficiently retrenched, is fastened in place at the close of the operation with a suture, so as to give the natural prominence to the lip, which would be otherwise unattainable. During the operation, spring-forceps should be applied at each angle of the mouth, to compress the coronary arteries and prevent loss of blood; this can also be obtained by the fingers of an intelligent assistant. The main points in the operation are to make the section of the edges free and complete, and to detach freely the two portions of the lip from the gum and jaw with the knife. In order to get them sufficiently loose, the knife must in some cases be carried outwards, detaching the soft parts from the very surface of the cheek-bone,—and, in cases of extreme deformity, even cutting through the soft parts on a line with the ala of the nose, so as

\*This cut is taken from a photograph, accompanying a report of the case by Dr. T. B. Andrews, in the December number of *The Photographic Review of Medicine and Surgery*,—Drs. F. F. Maury and L. A. Duhring, editors.

to get a sort of flap. The parts must come together without tension. If the parts are not sufficiently loosened to obtain this, there will be great strain upon the ligatures when the parts swell with inflammation; and, instead of healthy plasma to fasten the parts solidly together, there will be suppuration, ulceration, and consequent failure. If the parts are made sufficiently loose to come easily together, union will almost always be obtained by first intention; and it matters little then whether the parts are fastened together with the regular hare-lip pin, silver wire, or the common interrupted suture. One or two delicate steel toilet-pins are passed through both edges of the wound, down almost to the mucous membrane, so as to bring them squarely together. Then a fine suture is passed through before the ligature is thrown around the pins, bringing the vermilion edges of the lip neatly together and on a level. Sometimes an additional suture is introduced, with a curved needle, near the ala of the nose. The practice of the lecturer was to surround the pins with saddler's sewing-silk,—making a few figure-of-eight, but mostly oval, turns. It is best not to have too fine a thread: it cuts, and is apt to lead to ulceration. In delicate infants, he surrounds the pins with woollen yarn in place of the thread. If it is properly done, the child may safely take the breast immediately after the operation. See that the points of the pins are cut off; apply no dressings or washes, and have the child watched, so that it may not pull at the pins; and, if necessary to prevent this, have its arms secured by a strip of bandage to the chest.

January 13.—The child was again brought into the clinic-room, and was doing extremely well.

Now the question comes up for consideration, When shall the pins and sutures be removed? Sometimes they are left in too long—turning success into failure: the plasma, which had united the parts, being changed into loosening pus by the prolonged irritation.

The upper pin was removed to-day; loosening it first by rotation before pulling it out. If the thread which surrounds it adheres, it is to be allowed to remain; otherwise, to be taken away. The upper suture may be removed to-morrow; the other pin and suture probably by the day following. If the parts then should not seem positively firm, a strip of adhesive plaster may be laid across from one cheek to the other. If it should so happen that there is no firm union, and the parts separate partly or altogether, the adhesive strips must be relied upon to keep them *in situ*. It rarely answers to re-introduce pins in the ordinary way; they would produce increased irritation,—too much of which already has probably caused the failure of the operation.

In cases of young children where there is a deep notch in the jaw opposite to the fissure in the lip, thus giving it no base for support during the healing process, Prof. Pancoast has found great advantage to result from the use of a thin plate of lead pierced with holes, and the silver-wire suture. This gives support to the lip in front where the imperfect bone has refused it behind. In applying this, the silver wire should cross over the line of union, and then pass through the holes in the opposite end of the plate.

In cases of failure to get union after the ordinary operation with the hare-lip suture, where it would not be prudent to reintroduce pins, he has sometimes seen good results follow this plan, which is a modification of Bozeman's suture. The silver wires should then be passed, at least a quarter of an inch from the raw margin.

THE HISTORY OF CHOLERA.—The *Gazette Hebdomadaire* (*The Lancet*, March 16, 1872) has just brought to a close a series of no less than seven long articles on this subject, written by M. Tholozan, physician to the Shah of Persia. The author says at the end of his last article, "In forty-one years—viz., from 1830 to 1871—five great epidemics of cholera have swept over Europe; two came from Asia, and two from western countries. A great many local outbreaks, both secondary and tertiary, and some regional epidemics, were also observed. The only authenticated respites were from 1837 to 1847,—a period of about ten years; and from 1861 to 1865,—a period of four years. Thus we have only fourteen years non-epidemic out of forty-one years; the total of the epidemical years being thus as many as twenty-seven."

COTTON-WOOL AS A DRESSING FOR WOUNDS.—Dr. George B. Shattuck writes from Paris to *The Boston Medical and Surgical Journal* for April 11, 1872, describing a system for dressing wounds and amputations, introduced not long since by M. Alphonse Guérin, Surgeon at the Hôtel-Dieu, and which is now being tried quite extensively in the hospitals there. The dressing is cotton-wool, and its application is based upon the now generally well-known property which cotton-wool possesses as a filter of atmospheric germs. According to M. Guérin, the dressing should attain four objects,—viz., it should act as a filter of the air, excluding organic germs, and consequently preventing putrefaction; it should afford an elastic compression to the limb, and an equable temperature; and should allow complete repose to the parts during the process of restoration. When well applied, Dr. Shattuck says, the dressing does fulfil these demands; and in doing so it seems to be the best, as well as the simplest, system of treatment for wounds and amputations with which he is acquainted. M. Guérin insists upon the necessity of using a large quantity of cotton, and of bandaging tightly. He has applied as much as five pounds of cotton-wool after an amputation of the leg, but generally about one and three-quarter pounds is about the amount used.

In those cases which Dr. Shattuck has had an opportunity of observing, the absence of pain, the entire comfort, and good general condition of the patient, were remarkable. If the bandage which covers the cotton be so applied as to produce the proper compression of the parts, one can tap with considerable force upon the outside of the dressing without causing any unpleasant sensation in the wound; and a patient can often be up and about with a wound which would otherwise necessitate remaining in bed. The gain, both to the patient and to the attendants, from the fact that a wound or amputation which formerly would have been dressed twice a day is now disturbed only once in three, four, or even six, weeks, will be readily perceived. The bandages should be carefully watched, and readjusted if at all loose. Should the discharge appear to any extent at the surface of the dressing, the latter should, as a rule, be changed. One of the most striking things about the dressing is said to be the very small quantity of discharge which collects, even in the course of several weeks. In one case of amputation of the leg there was not more than three ounces of pus, including that which had soaked into the dressing, upon its removal after three weeks. The pus generally has a stale but not putrid smell, and in several cases examined under the microscope gave no evidence of organic germs.

Dr. Shattuck, however, closes his letter by saying that the process of granulation is not always so rapid beneath cotton-wool as might be at first expected, and that it is better not to prolong the treatment beyond a certain point.

THE SYPHILIS-CORPUSCLES OF LOSTORFER.—The committee of accomplished microscopists (*The Boston Medical and Surgical Journal*, April 11, 1872) appointed from the Boston Society for Medical Observation to investigate the subject of syphilis-corpuses in the blood have reported, as the unanimous result of their individual and independent researches, that their conclusions are negative; that the bodies described by Lostorfer as peculiar to syphilitic blood were found in the blood of syphilitic patients and of healthy persons as well; and that the so-called corpuscles appear to have their origin in certain physical or chemical changes to which the blood-globules are subjected in the course of prolonged microscopic examination.

DISEASES OF THE MUSCULAR WALLS OF THE HEART.—Dr. Richard Quain, the Lumsian Lecturer for this year, has taken (*Lancet*, March 23) this as the subject for his lectures. He attaches much more importance to diseases of the walls of the heart than writers generally, and shows that these are not always simply complications of valvular diseases. Enlargement of the heart, he says, may depend first on an increase in the muscular fibres; secondly, on an increase in the connective tissue; and, thirdly, on an increase of fat. The causes of enlargement of the heart may be classified thus: (1) Agencies acting through the nervous system; (2) Agencies acting mechanically; (3) Agencies originating in disordered conditions of its nutritive functions.

# PHILADELPHIA MEDICAL TIMES.

A SEMI-MONTHLY JOURNAL OF  
MEDICAL AND SURGICAL SCIENCE.

PUBLISHED ON THE 1ST AND 15TH OF EACH MONTH BY

J. B. LIPPINCOTT & CO.,

715 and 717 Market St., Philadelphia, and 25 Bond St., New York.

WEDNESDAY, MAY 1, 1872.

## EDITORIAL.

### HOSPITAL MANAGEMENT.

TWO circumstances connected with hospital-management have lately happened in London, which have given rise to much feeling. In one case a surgeon, or, perhaps, two surgeons, of the London Hospital made such representations to the committee of the hospital as to the unsatisfactory manner in which one of the assistant-surgeons to the same institution performed his duty, that the committee thought themselves obliged to call for his resignation. There can be very little doubt that the action of the two surgeons was taken without due consultation with their colleagues, and it is intimated that it was dictated rather by feelings of malice towards a colleague "with whom there had been personal differences in regard to the position he was entitled to hold at the hospital," than by the desire to advance the interest of the patients committed to his care. We do not for a moment doubt that there may be occasions when the conduct or practice of a physician should become the subject of grave consideration and examination by his colleagues, but we are equally sure that no one member of the medical staff of a hospital should ever in an underhand way plot the disgrace of a colleague.

In the other instance, the two attending-surgeons to the Orthopædic Hospital, Messrs. Adams and Tamplin, feeling themselves aggrieved by a report in which their conduct as medical officers was severely commented upon, and which was adopted at the annual meeting of the governors of the hospital, have resigned their positions. There is abundant evidence to show that the report was suggested by Mr. Brodhurst, one of the assistant-surgeons, who undoubtedly expected to profit by the disgrace of his colleagues. Lord Abinger, the chairman of the Committee of Management, who, in common with many of the other influential governors of the hospital, disapproves of the report,—some of the assertions in which have been denied by Dr. Murchison, who was quoted as authority for them,—has written to the English medical journals that he has called a special court of the governors in order that certain objectionable paragraphs may be expunged from the report. If this is done, Messrs. Tamplin and Adams, to whose professional skill and ability the hospital un-

doubtedly owes much of its present reputation, will withdraw their resignations.

Lord Abinger's letter is very damaging to Mr. Brodhurst. It shows clearly that the money by which thirty persons became subscribers to the hospital, and therefore entitled to vote, was paid by the latter gentleman; and it also shows conclusively that it was practically by these new subscribers that the report was carried. A resolution was also introduced and passed, that, after a certain number of years' service, all assistant-surgeons should have the rank of full surgeons,—which, in consequence of the resignation of his superior officers, has converted Mr. Brodhurst into the senior surgeon of the hospital.

There are, perhaps, few hospitals in this country in which trouble similar to that described as occurring at the London Hospital has not arisen. It may be easily prevented, it seems to us, by making the members of the medical staff of hospitals *ex officio* managers, as has been recently done, to a certain extent, at the Orthopædic Hospital in this city. The physician and surgeons to that institution have the right to attend the meetings of the Board of Managers, and, although without votes, may discuss questions which arise and give their opinions as to the proper management of a hospital, of which they are often better judges than the managers themselves. The adoption of such a plan would go far to bring about a good feeling between the managers and the *managed*, and to increase the efficiency of the medical service. Dr. Lionel S. Beale has suggested, through the medium of the *British Medical Journal*, that the members of the medical staff of a hospital should have a share in its management, and says he should like to hear the objections to this proposition. We do not see how there can be any; and we do see how very great advantage might spring from it if it were adopted. "I believe," Dr. Beale adds, "in one or two hospitals at this time one or two members of the staff have much influence in the Committee of Management, while their colleagues—their equals in every other respect—may have little or none. This is disadvantageous to the charity, troublesome and confusing to the members of the committee, and most unfair towards those members of the medical staff who are not represented, and who do not happen to be acquainted with the most active members of the committee." This condition of things has, we happen to know, existed at various times in more than one hospital in this city. It is an evil which demands prompt suppression; and we believe we have pointed out the way to bring this about.

In reading the correspondence in the English journals in reference to the occurrences at the London and Orthopædic Hospitals, we were struck with the fact that such matters always find their way into the medical press abroad, and that they very rarely do so in this city. An election has recently been held at the Wills Ophthalmic Hospital in this city, which resulted in the dropping of two of the members of the old staff, and in the appointment of eight attending-surgeons instead of four. No reason has been assigned for this action by the Board



of Trusts, who have control of this hospital; and its course is incomprehensible, since some of the surgeons that have been added to the staff do not practise eye-surgery exclusively, and are certainly not the superiors in reputation of those who have been dropped, and who, by a strange inconsistency, have since been created emeriti surgeons. The Board has, moreover, not exercised as much discretion in the selection of the members of the medical staff as could be wished, having placed upon it a surgeon who has committed an offence as stupid as it was dishonest, and with whom we venture to say that the majority of his present colleagues would not have consulted before his election. And yet he is suffered to remain unmolested in the place which men who are, to say no more, his superiors in their knowledge of ophthalmology, were unsuccessful in obtaining.

In other cases we have heard of unfair means being used to influence managers in their choice of candidates for hospital position; but our attention has never been drawn to the fact in such a way as to justify us in bringing it to the notice of the medical public.

#### THE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

WE have from time to time kept our readers informed of the preparations which were being made by the Committee of Arrangements for the comfort and amusement of the delegates to the approaching meeting of the American Medical Association. There is every reason to believe that there will be a large attendance of delegates, many of whom will doubtless visit our city for the first time, while not a few have received the doctorate from one of our colleges. It is of course to be hoped that the meeting will be a harmonious one, and that no subject likely to provoke unpleasant discussion may be introduced,—or that, if introduced, it will be met and considered in a fair spirit.

The exhibition, of which notice was first given in this journal, is to be held in the Hall of the College of Physicians, and will continue during the session of the Association. We are told by those having it in charge that it will be a success.

THE *Photographic Review of Medicine and Surgery* comes to us this month with the following table of contents: 1. Deformity of Hip; by Lewis A. Sayre, M.D. 2. Encephaloid of Thigh; by Arthur Van Harlingen, M.D. 3. Rosacea; by Louis A. Duhring, M.D. 4. Encephaloid Tumor of Neck; by Thomas H. Andrews, M.D.

The photographs are all well executed, and we commend the *Review* to the notice of the delegates to the American Medical Association.

We also call the attention of our readers to the notice in our advertising columns of a Private Hospital for Diseases and Injuries of the Spine, which is under the immediate care of Dr. Benjamin Lee.

#### OBITUARY.

##### PROFESSOR SAMUEL HENRY DICKSON.

Dr. SAMUEL HENRY DICKSON, who died in this city, March 31, 1872, was born in Charleston, South Carolina, September 20, 1798, of Scotch-Irish parents. In 1811, at the early age of thirteen, he went to Yale College, entering the Sophomore class and graduating in 1814. In December, 1814, just fresh from his collegiate honors, he commenced the study of medicine with Dr. P. G. Prioleau, of Charleston, in whose office he remained for five years. He always entertained towards his preceptor, who was one of the prominent medical practitioners of that city, the most enthusiastic regard, and even when a very young student he received from him proofs of the greatest confidence and attachment. He attended two courses of lectures at the University of Pennsylvania, in which time-honored institution he graduated in 1819, and of the Alumni Association of which he was at his death an honored Vice-President. But his practical medical experience dated at an earlier period, for we find him in 1817 and subsequently, before he had taken his degree, actively engaged during the prevalence of yellow fever in Charleston whenever and wherever his services could be made available. Thus we see early exhibited in the future distinguished author, teacher, and practitioner that courage in the presence of sickness and danger, which was so characteristic of him in his after-years. His personal interest in these epidemics probably led him to the selection of yellow fever as the subject of his graduating thesis, which was afterwards published. He entered upon the active duties of his profession in Charleston in the July following his graduation, and was at once appointed assistant to Dr. Glover of the Yellow Fever Hospital, of which, together with the Marine Hospital, circumstances soon gave him the entire charge, he being at this time but twenty-one years of age.

From this time his practice grew rapidly, and, until he abandoned it from ill health, continued to be almost overwhelming, seriously taxing his time, and, what was of more consequence, his physical health. His income from practice soon grew to be very large, and it became necessary to call into requisition the services of two younger physicians, who remained in pleasant but laborious association with him for several years. His visiting-list of patients at one time numbered as many as eighty-three in a single day. Dr. Dickson through his long and useful life was in the habit of carefully noting down in his commonplace-book everything that might be to him worthy of permanent record, not only in his own personal experience, but also culled from the genial paths of literature. We thus learn that in 1822 and 1823, when only twenty-four years of age, he commenced to lecture, reading a course on physiology to a class of city students, and soon after, in conjunction with Drs. Ramsay and Frost, set about the establishment of a medical college in Charleston, which went into operation in 1824, Dr. Dickson being appointed Professor of the Institutes and Practice of Medicine. In consequence of a controversy with the medical society, he resigned, but with other medical gentlemen of distinction in Charleston founded another institution,—the Medical College of South Carolina,—which was entirely successful. His duties here included the same department which he had illustrated by his eloquence and ability in the other school, and this he only relinquished in 1847, when he was invited to the medical department of the University of New York, in which city he remained for three winters. He then received an urgent invitation from the Charleston Medical College to return to his old chair; Dr. Bellinger, who had filled the chair of surgery, offering to resign, leaving it to Dr. Geddings, who had previously taught that of practice. This he accepted, and on his return to Charleston received the ovation of a public dinner from his friends of the profession and others. He remained here until 1858, when he was called to the position of Professor of Practice in the Jefferson Medical College of Philadelphia, upon the death of Dr. John K. Mitchell, who had always been one of his warmest personal friends and admirers. Here he continued to lecture until within a month of the termination

of his exemplary life, and, it is said, never with more spirit and earnestness, or with more satisfaction to his auditors, than during the winter just past, when, in spite of the physical disabilities under which he was placed by continued ill health, he did not miss a single lecture. It may be stated as a matter of interest in this connection, that for twenty years past he never lectured from any written paper, not even carrying a line of heads. Although Prof. Dickson, in the later years of his life, instructed classes of greater numerical importance than those of his younger days, his services to the cause of medical education were not less conspicuous at the latter period. He not only directed the studies and courses of reading of his office-students, and their pharmaceutical manipulations in making up his prescriptions,—for such was the custom of those times,—but also read lectures to them, once giving them a whole course on medical jurisprudence. Seventy young men thus graduated from under his immediate teaching. In addition to the chairs occupied by him, he had been offered professorships in Lexington, Nashville, Richmond, and Augusta.

His health had always been wretched. When at Yale College he was ill with inflammation of the stomach, which left him with impaired digestive powers, and from 1825 he was for many years a victim of phthisis, having many large hemorrhages from the lungs, and his health did not improve until after a tour in Europe. So far back as 1837 began the obscure and painful abdominal disease from which he suffered, at times agonizingly, during the rest of his life, almost to the very hour of his death. In spite of all this, he was a man of wonderful industry. From every book—and his reading was as varied as it was incessant, embracing not only every phase of medical literature, but also all the shades of lighter or even more ponderous reading, such as poems, travels, novels, law, and divinity, everything indeed that came within his reach—he copied carefully any fact, expression, or incident that struck him, and he thus collected and filled quite a number of commonplace-books, which are beautifully written and carefully indexed. His passion for instructing himself, for learning something, continued strong almost to the last.

His principal medical systematic work was the "Elements of Medicine;" but he wrote several smaller books, on "Life, Sleep, Pain," etc., and other subjects, and gave numerous contributions to literary and medical journals on a vast variety of topics. As late as last spring, three papers from his pen appeared simultaneously in different journals, and he has left behind him a laboriously and carefully prepared but unfinished paper on smallpox. He had also delivered a large number of addresses before medical and literary institutions, societies, etc. He presided in Charleston at the dinner given by the physicians to Dr. Marshall Hall; was appointed to publicly introduce Edward Everett to the people of Charleston; was one of the delegates to the laying of Bunker Hill Monument corner-stone, and was prominent on all occasions of general and popular interest, identifying himself with every movement of importance in his native city. He was an active member of almost all the historical, literary, and scientific bodies there, and of similar societies in Philadelphia, New York, and elsewhere, even when occupied with the cares of practice and authorship, and when suffering constant pain from the affection previously alluded to.

Of these and all other matters connected with a sketch of the distinguished subject of this notice, much more might and it is to be hoped, will be said in an extended biographical memoir. Let us add to all these the knowledge that his friends enjoyed of the beauties of his private character. In the death of Professor Dickson, the profession lost an eloquent lecturer, whose beautiful, almost poetical, language charmed while it instructed every hearer; an author, whose chaste and refined phraseology was the theme of praise from every reader; and a practitioner and medical adviser, whose kindly sympathy and clear judgment were always ready and most generously displayed at every available opportunity. His friends, however, cherished him for his cheerfulness and geniality, his tenderness and loveliness, his fortitude and conscientiousness, his frankness and courtesy. Wherever he went, these qualities always gained him many and enduring friendships, which have ended only with his life.

Dr. Dickson's death was the result of the growth of a

large solid abdominal tumor, seated over the aorta, which had itself been dilated for a long series of years. It was probably of mesenteric origin, and by its pressure on the intestines had often given rise to serious obstruction and intense suffering. No post-mortem examination was made.

## PROCEEDINGS OF SOCIETIES.

### PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY, MARCH 28, 1872.

THE PRESIDENT, DR. J. H. HUTCHINSON, in the chair.

DR. JOHN ASHHURST, JR., exhibited the following specimens:

1. *Chronic hypertrophy with adenoid tumors of the prostate gland; granular kidneys.*

These specimens were derived from the body of a man in the middle age, who died in the Episcopal Hospital on March 15, 1872. The patient, who was of intemperate habits, applied for admission on March 9, complaining chiefly of frequent micturition. A catheter was passed once to make sure that there was no distention of the bladder, but the use of the instrument was not persisted in, as rather free hemorrhage followed and gave rise to the suspicion that the prostatic enlargement might be of a malignant nature,—a suspicion which, however, was not confirmed by post-mortem inspection. For five days after his admission the patient passed water without any difficulty, but on the evening of March 14 was attacked with nearly complete suppression of urine, which continued almost up to the time of his death, twenty-four hours later.

A post-mortem examination showed marked enlargement of the prostate, chiefly affecting the lateral lobes, with dilatation of the prostatic portion of the urethra (forming a pouch of considerable size), and with the formation of several isolated masses corresponding to the adenoid or glandular prostatic tumors described by Thompson, Paget, Ferguson, and others. The kidneys were abnormally pale, and their cortical portions diminished in thickness. A careful microscopic examination was made by Dr. J. G. Richardson, who has courteously furnished the following note:

"The cortical portion . . . displayed under the microscope an excessive formation of fibrous tissue around the Malpighian corpuscles (cirrhosis), which were much smaller and more closely crowded together than is normally the case. The uriniferous tubules in the pyramids were in many instances choked up with desquamated epithelium and granular matter, but exhibited a less degree of departure from health than was manifested in the cortical zone of the organ."

2. *Recurrent mammary cancer.*

The patient was a woman 56 years of age, from whom Dr. Ashhurst removed the left mamma in May, 1870 (see *Proc. Path. Society*, vol. iii. p. 174, and *Am. Journ. Med. Sciences*, October, 1870, p. 456). The wound healed with unusual rapidity, and the patient remained free from disease until last autumn,—a period of about sixteen months. She again consulted Dr. Ashhurst in the latter part of October, 1871, when a small cancerous nodule was found above and distinct from the cicatrix, at its inner or sternal part. Immediate removal was advised, but nothing further was heard from the patient until the 18th of the present month (March), when, having been disappointed in obtaining a cure by "rubbing" at the hands of an irregular practitioner in the northern part of the city, she desired to submit to a second operation. The tumor by this time had increased to almost, if not quite, the size of the primary growth, and was evidently on the point of ulcerating,—but was still solitary, and not adherent to the thoracic parietes, while there was no implication of the neighboring lymphatic glands. Excision by means of an oval incision was practised the following day (19th), the growth being removed with a complete investment of surrounding tissue. The loss of integument was too extensive to admit of the closure of the wound, which was, however, now (March 28) rapidly filling up by granulations, the condition of the patient since the operation having been perfectly satisfactory.

The specimen was referred to the Committee on Morbid Growths, which at a subsequent meeting reported that—

"The tumor of the breast presented by Dr. J. Ashhurst, Jr., is a well-marked medullary carcinoma. When a section is made vertically through the growth and that portion of the pectoral muscle removed with it, numerous whitish striæ or bands are seen running from the tumor into the muscle; and these portions, when placed beneath the microscope, show an active cell-proliferation in the intermuscular septa. The probability of local recidive is therefore great."

3. *Upper portion of femur, and kidneys, from a case of iliac abscess which presented certain unusual phenomena.*

The patient was a young man who entered the Episcopal Hospital in the autumn of 1871, with an abscess which had opened at the outer side of the left hip. Dr. Ashhurst took charge of the case on January 1, 1872, at which time it was evident that recovery was not to be anticipated. Besides the openings—for there were more than one—on the outer side of the limb, there were others over the crest of the ilium, posteriorly, and in the left groin above the line of Poupert's ligament; there was, however, no pelvic deformity, and neither fulness nor tenderness in the line of the sacro-iliac junction, and, though the condition of the patient did not allow a sufficiently thorough examination to permit a positive diagnosis to be made, it appeared probable that the disease had originated in an acetabular coxalgia, followed by perforation and by intrapelvic suppuration, which had found a vent at the inguinal opening. There had never been any symptoms of spine-disease, and, besides, the position of the inguinal opening discounted the idea of psoas abscess. There was, as already mentioned, no evidence of sacro-iliac disease; and the fact that the abscess had first pointed in the femoral region seemed to favor the diagnosis of coxalgia with secondary pelvic implication, rather than that of iliac abscess. It is, however, but fair to say that motion of the hip-joint was not at this time painful, though it subsequently became so. Two or three weeks before death a large collection of pus was found in the right femoral region, and during the last stages of the case thrombosis of the right iliac vein occurred, and produced marked œdema of the corresponding extremity. Ultimately the left thigh and leg became excessively sensitive and painful, and the slightest motion caused the patient to scream with agony. Death from gradual exhaustion took place on March 22, 1872.

A post-mortem examination was made the following day, when it became evident that the case had been really one of suppuration in the areolar tissue of the left iliac fossa (iliac abscess), the pus having made its way downwards through the sacro-ischiatric notch and thus appearing on the outer side of the thigh,—having subsequently perforated the abdominal wall anteriorly, and having ultimately burst into the sheath of the psoas muscle, in which it passed upwards, producing slight erosion of one or two of the lumbar vertebrae. After escaping from the pelvis posteriorly, the pus had likewise passed upwards, crossing the spine on a level with the crests of the ilia, and forming the large accumulation which was observed in the region of the right hip. The inner surface of the bony pelvis appeared to be healthy, but the left hip-joint had become secondarily implicated, the round ligament being partially destroyed and the articulating cartilages of both caput femoris and acetabulum having almost disappeared. The liver was somewhat cirrhotic, but the only viscera which were markedly abnormal were the kidneys, of which the right presented a mottled appearance, while the left was of a peculiar creamy-white hue, probably owing to an advanced stage of fatty degeneration.

Dr. O. H. ALLIS presented a brain exhibiting an injury from fracture of the skull, in which the lesion was most marked on the side opposite the seat of fracture, where also a clot was found.

Dr. ALLIS also presented a specimen of malformation of the heart, in which there was stenosis of the pulmonary artery, perforation of the ventricular septum, and dilatation of the right ventricle. The heart was removed from a young man eighteen years of age. Among other symptoms before death was dropsy.

THE PRESIDENT said that the boy whose heart had just been exhibited by Dr. Allis was, for several years before his death,

an inmate of "The Union School and Children's Home" of this city. When on duty as attending-physician to that institution, he had had frequent opportunities for studying the principal features presented by the case. There was at all times decided cyanosis, and this became much more marked whenever the boy exerted himself unduly or was the subject of fever. Very alarming symptoms had more than once in his experience been produced by a very slight attack of fever. Generally, however, the boy had apparently fair health, but was rather undeveloped both mentally and physically. There was, on percussion, evidence of enlargement of the heart, and on auscultation a loud systolic murmur was heard over the body of the heart, at the level of the fourth rib, to the left of the sternum. It was not propagated to any extent in the aorta, and scarcely at all towards the apex of the heart.

Dr. WM. DARRACH presented a specimen of ulceration of the mucous coat of the rectum, in a child three months and twenty-six days old, which died March 26, 1872. Before death there had been vomiting, constipation, and great distention of abdomen; at first, "lumps" over the abdomen, as described by the nurse. The bowels would not be open for four, then five or six, days, and finally nine elapsed without an evacuation. The child was nourished by cow's milk and water; the mother nursed the child for a short time only.

The following were the post-mortem appearances: Emaciation was marked. The lungs were healthy. Abdomen much distended, tympanitic; skin very tense. On section, gas immediately escaped, leaving the large bowel exposed, distended throughout its whole course; generally pale in appearance except over the right iliac fossa, where the bowel was vascular for half an inch or more, contrasting markedly with the remaining portion.

Rectum generally pale, but at middle part presented, for about half an inch, great vascularity externally. Upon being opened, three or four very red elliptical ulcerated patches could be seen. The muscular coat appeared to be hypertrophied. There was very little general peritoneal inflammation,—only over the inflamed portion of the rectum. There was a small amount of fluid in the cavity of the abdomen.

Liver large and firm. Gall-bladder full of dark bile, staining the adjacent bowel.

Stomach pale, and containing fluid; mucous membrane pale and firm; no vascularity whatever. The small bowels were not examined, but presented no external abnormal signs. The colon was much distended, but pale.

Dr. Darrach thought this condition rare in children, and in consulting a number of standard works on children's diseases he had not met with a similar case. In inflammation of the cœcum, constipation is noticed as a marked symptom, in contradistinction to diarrhœa from disease of the small bowels.

Dr. A. F. MÜLLER presented a specimen of green stick fracture, in which there was fracture, in two places, of both bones of the forearm, from a boy aged fourteen, whose arm was torn off at about the middle of the humerus by being caught in a belt.

Dr. JAMES TYSON presented, for Dr. H. C. WOOD, a specimen of aneurysm of the ascending aorta and its arch, from a patient dying in the Philadelphia Hospital. The coats of the vessel were the seat of atheromatous change, and were thickened to measure four lines.

Dr. TYSON also presented, for Dr. WM. PEPPER, a specimen of syphilitic gumma of the liver, from a colored woman aged twenty-five, who died in the Philadelphia Hospital, and was the subject before death of left hemiplegia and paralysis of the distribution of the right oculo-motor and abducent nerves.

The post-mortem examination revealed the gummy tumor exhibited in the liver, but the lesions of greatest interest were found in the brain. The calvarium was much thickened, and several spiculae of bone were found along the longitudinal sinus. Several flat broad-based gummy tumors were found springing from the inner surface of the dura mater; one over the convexity near the longitudinal sinus, another over the posterior part of the left hemisphere. There was also another large gummy growth filling the anterior part of the middle fossa of the skull on the right side just behind the orbit. The right oculo-motor and abducent nerves passed through the substance of the mass, and just before the point where they entered were characterized by a marked and complete change from



the healthy white appearance of the nerve-tissue to that of translucent gray degeneration. This growth extended backwards to the base of the brain, matting together the corpora quadrigemina, middle cerebral arteries, pituitary body, and optic chiasm; and thence extended along the right fissure of Sylvius. The walls of the arteries were much thickened, and extensive softening was found on the right middle lobe, extending upwards into the corpus striatum from the fissure of Sylvius.

## BIOLOGICAL AND MICROSCOPICAL SECTION OF THE ACADEMY OF NATURAL SCIENCES.

MONDAY, APRIL 1, 1872.

DIRECTOR W. S. W. RUSCHENBERGER, M.D., in the chair.

Present, Messrs. J. G. Hunt, I. Norris, Humphrey, Pierce, Tyson, Shaeffer, McQuillen, W. Hunt, Trueman, Betts, Corlies, Walmsley, Buckingham, Allen, and Richardson.

Visitors, Dr. J. E. Garretson, Mr. Holman.

Dr. J. GIBBONS HUNT made an interesting verbal communication upon "The Preparation and Preservation of Tissues," in the course of which he remarked that he had of late quite discarded the use of glycerine, and the terebinthinate media, for mounting such objects, in favor of watery solutions of low specific gravity, and, as evidencing the superiority of aqueous fluids, exhibited a specimen of *Aspergillus* which he maintained could only be seen as thus prepared; no gradual condensation of a heavier liquid, such as glycerine or balsam, being sufficient to answer the purpose. Dr. Hunt stated that any extremely delicate cell-walls are most clearly visible when mapped out by carmine or aniline solution, and this staining, if done with care, may be accomplished without any other alteration of the tissue whatsoever. The green portion of plants cannot be satisfactorily preserved in alcoholic liquids, because spirit of wine dissolves chlorophyll, but the verdant hue may be admirably imitated by staining with a solution of indigo aniline, to which a few drops of tincture of picric acid have been added.

The speaker here exhibited a specimen of *Sphagnum* from Washington, mounted in balsam, which he said showed almost nothing, whilst a similar preparation mounted in a watery solution displayed every detail of its structure.

In regard to animal tissues, Dr. Hunt observed that epithelial cells and sections of mucous membrane can hardly be seen at all when mounted in balsam, but when preserved in an aqueous fluid of low specific gravity, show to great advantage; and mentioned further, in reference to staining animal structure, that he had found that a neutral solution of carmine, prepared according to the formula of Rollett, enabled us to display, in muscle for example, not only nuclei but also well-defined cell-walls.

In conclusion, the doctor called the attention of members to an ingenious slide, invented by Mr. D. S. Holman, Actuary of the Franklin Institute, for exhibiting infusoria, especially under the gas microscope.

These slides, he remarked, are indispensable to the working microscopist. They are made by grinding a deep depression in a thick slide, and then making a very shallow circle all round the deeper central cavity. If the central depression be filled with the organization in water which we desire to study, and covered with a thin glass, in a short time the shallow circle all round the margin will be filled with minute objects, often zoospores or other products in the life-history of the object in the deeper cell. The pressure of the atmosphere retains the cover in position.

Dr. Hunt also exhibited a very convenient lamp attached to the board upon which his microscope stood, so as to allow of both being moved or even passed around a table together, without disturbing the perfection of illumination obtained for any particular object under examination.

Dr. JAMES TYSON observed that he had had a good deal of experience in mounting animal tissues, and believed that the principle as enunciated by Dr. Hunt of preserving them in aqueous solutions of similar specific gravity to those which normally bathe their surfaces was the true one. He had that

very day found two of his valuable specimens, mounted a couple of years ago in the old-fashioned way, so deteriorated as to be almost worthless.

On invitation of the Director, Mr. HOLMAN remarked that by means of his cell (as exhibited by Dr. Hunt), he had kept a vinegar eel locked up for six weeks in a small groove around a bubble of air; also that he had found the minute infusoria always make their way very eagerly to the air-line, and will congregate around air-bubbles, where rotifers, for example, could be seen to break up apparently into multitudes of smaller organisms. This cell also possessed a great advantage in enabling us to keep a small animal alive even for five minutes whilst exhibiting it through the gas microscope, because the greater bulk of fluid it will contain, requires a much longer time to become heated to a temperature fatal to the living organism under examination.

In reply to a question from Dr. Tyson, Mr. HOLMAN stated that the slides now on the tables had been made according to his instructions by Mr. Weist at a cost of \$1.50 each.

Dr. HUNT suggested that the cost might be much diminished by omitting to polish the deeper concavity, which it was not at all necessary to have transparent.

Mr. HOLMAN answered that it was in his opinion an important advantage to have both excavations polished, because otherwise it was difficult to keep the slide perfectly clean.

Dr. ISAAC NORRIS remarked that polishing the deeper excavation was also useful on account of its enabling us to reverse the slide and examine as occasion required, with a low power, organisms which had retreated to the bottom of the fluid.

Dr. TYSON inquired what cement could be depended upon to confine these watery solutions.

Mr. WM. H. WALMSLEY observed that his new form of cement, made without any balsam, but composed of equal parts of gum damar and mastic dissolved in benzole, and thickened with white zinc ground in oil (not dry), did not leak, and was not liable to crack off the glass.

Dr. HUNT said that the damar cement was a useful one, but even with it the specimen must be mounted carefully, or no satisfactory result could be attained.

Dr. JOS. G. RICHARDSON remarked that some specimens of human red blood-corpuscles, which he had mounted more than six months ago in a saturated solution of acetate of potash, were still in a good state of preservation, and inquired of Dr. Hunt whether in his experience this medium was not much more satisfactory than glycerine as a preservative agent.

Dr. HUNT admitted in reply that the acetate of potash solution was less objectionable than other dense fluids.

Dr. TYSON asked Dr. Hunt what steps he took to get rid of the excess of liquid around the margins of the cover.

Dr. HUNT answered that he had never been troubled with any difficulty of the kind suggested by Dr. Tyson, because if a thin layer of cement was applied to the surface of the cell just before putting on the glass cover, a complete sealing up of the object in its preservative fluid was at once accomplished, and any superfluous liquid could be gently washed off by means of a camel's-hair brush dipped in water before the external cementing ring was laid on.

Dr. TYSON remarked that it was in regard to mounting specimens which practical histologists meet with in ordinary examinations and cannot easily transfer to previously prepared cells that he was anxious to obtain information.

Mr. WALMSLEY suggested that just as there was no royal road to the hill of learning, so there was no presidential path to the mounting of specimens, and that the only way to gain success was by learning to perform carefully and thoroughly each step of the process.

Dr. TYSON inquired of Dr. Hunt whether he had ever been able to preserve specimens in solution of acetate of potash without the use of cells.

Dr. HUNT said he was not sure that either glycerine or solution of acetate of potash would allow permanent mounting except by employing a carefully prepared cell. He was desirous, however, that other members who had not yet spoken should give their experience, and begged leave to request the chair to call upon Dr. McQuillen for a contribution to the general fund of information.

Dr. J. H. MCQUILLEN remarked that his observations accorded in the main with those of Dr. Hunt, except that he

was inclined to endorse in part the high estimate Dr. Lionel S. Beale placed upon glycerine as a preservative medium. When used in well-arranged cells he had found no such difficulty as that referred to by Dr. Tyson, some of his specimens of trichina spiralis, for example, remaining in perfect order for over two years.

Dr. TYSON observed that the difficulty he had met with was in manipulating thin tissues requiring compression, and those also which were of too great tenuity to admit the use of a cell when examined with high powers.

Dr. HUNT stated that he had in his collection a specimen of tessellated epithelium, which, although mounted in a cell, could be well shown with a  $\frac{1}{80}$ th inch objective giving with the deep eye-piece a power of 2000 diameters.

Dr. RICHARDSON said that for examination with high powers ( $\frac{1}{25}$ th and  $\frac{1}{50}$ th) he had been accustomed to mount specimens in glycerine or acetate of potash solution without the employment of cells, by applying, in the usual mode, a small drop of the preservative fluid at the right and left lateral borders of the cover, and at once dotting the upper and lower margins of the same with zinc-white cement, so as to fix it securely in position; then, after twenty-four hours, when the solution had completely penetrated beneath the thin glass, there was no difficulty in wiping off the excess of liquid with a cloth slightly moistened in water, and afterwards securing the whole by a ring of cement, thrown around it upon a turn-table, in the ordinary way.

In reply to a question from the Chair, Mr. WALMSLEY stated that Bell's cement was reported to be composed of gum shellac dissolved in absolute alcohol and colored with dragon's blood.

Dr. HUNT remarked that he had not been able to succeed in preparing a good cement by this formula, and that another member of the section, Mr. Charles Bullock, had tried many experiments in regard to dissolving shellac in alcohol, without satisfactory result.

Dr. TYSON observed that he had found ether useful for thinning Bell's cement, and mentioned that he had been so well pleased with this compound that he had of late employed it exclusively in his preparations.

Dr. MCQUILLEN asked if Dr. Hunt had mounted sections of bone or teeth in anything but balsam and glycerine, both of which gave, he thought, such erroneous ideas of the lacunae.

Dr. HUNT replied that he quite agreed with Dr. McQuillen as to the unsatisfactory nature of these menstrua for mounting sections of these structures, since in them the lacunae of the former became almost invisible to ordinary research, and could only be brought fairly into view by a trick of illumination. He believed his plan of using watery solutions of low specific gravity gave much better results.

Dr. W. S. W. RUSCHENBERGER inquired whether any of the members present had experimented upon the mounting of blood-corpuscles in a solution of hypophosphate of soda, and, in reply to a question from Dr. Hunt, said that he believed Dr. Paul B. Goddard, who first suggested the method to him, was accustomed to use a solution of about the specific gravity of normal blood serum.

Dr. HUNT remarked that he thought we should be very cautious about drawing deductions from the aspects of animal tissues as ordinarily examined, since the fact is we know nothing whatever about life and living processes, and that all our so-called histological investigations are really pathological ones.

Dr. TYSON observed the circumstance, for example, that a corpuscle, as seen circulating in the web of a frog's foot, was so similar in all its visible characters to those examined after they had been drawn upon a slide, that he could not think any marked alteration took place soon after leaving the vessels.

Dr. RICHARDSON mentioned that a statement appeared some months since in several of the medical journals to the effect that the nucleus in the frog's red blood-corpuscle was a post-mortem change; and asked Dr. Tyson whether he had ever noticed such an appearance in red disks which were still within the capillaries of the animal.

Dr. TYSON said that although he believed nuclei were visible under such circumstances, yet he could not distinctly recollect having seen one in a circulating red blood-corpuscle, and indeed had been struck with the frequent absence of nuclei in the corpuscles of freshly-drawn frog's blood.

## REVIEWS AND BOOK NOTICES.

PLAIN TALK ABOUT INSANITY. By T. W. FISHER, M.D. Boston. 8vo, pp. 97.

This little book is well fitted to enlighten the non-professional public on some very important points connected with insanity and the insane. That there is need enough of it, the countless bugaboos that possess the public mind on this subject show only too clearly. Common as insanity is, important as its consequences are, reaching even to unborn generations, it is pre-eminently the disease in which the mischief accomplished by ignorance and prejudice is witnessed. And curiously enough, by a sort of practical paradox, this mischief has been steadily increasing with the increase of knowledge generally. It illustrates the characteristic tendency of our times, when people read and listen to be amused or excited, and derive their notions on a matter of science from novels, plays, and newspapers. The prospect would be less discouraging if the evil in question were confined to the ignorant and thoughtless; but it is a lamentable fact that on the cultivated and thinking classes the advances that have been made within the present century in the knowledge of mental disease have made comparatively little impression.

Such books as this we welcome with peculiar satisfaction, for they seem more likely than any other agency to meet the prevalent errors. Dr. F. is fitted for his task by having been for several years assistant-physician in the Boston Hospital for the Insane, and by a large consulting practice subsequently. We cannot better indicate the scope and character of the work than by giving the titles of the chapters, which are "Causes of Insanity," "Forms of Insanity," "Symptoms of Insanity," "Partial Insanity," "Monomania," "Medical Treatment of Insanity," "Moral Management of the Insane," "Home Treatment of the Insane," "Hospital Treatment for the Insane," "Hospitals and Asylums for the Insane," "Medico-Legal Aspect of Insanity." Much of his materials has been supplied by the author's own observations, but he has made a judicious use of the thoughts of others. It has evidently been his design to furnish the kind and amount of information which should be possessed by every one making any pretension to intelligence. Its effect will be to render the reader better acquainted with the conditions on which his mental health depends, and better qualified to meet those questions concerning insanity which, in one way or another, at some time or other, are forced upon almost every person in the community. Certainly, if its instructions were duly heeded, the long list of incurables would be shortened, and we should be spared some of those scandalous scenes that result from a foolish interference with the well-advised arrangements of others.

Dr. Fisher recognizes the predominant part borne by hereditary cerebral defect in the production of insanity, and not only of insanity, but of various other forms of nervous disease, of intemperance, of vice and crime. It is one of the mysteries of human conduct that men act in violation of well-settled laws of breeding, and then wonder that so much of the stock become subjects of disease or a faulty organization. If they were half as careful in their own unions to breed from healthy, vigorous individuals as they are in regard to their domestic animals, we should have little occasion for hospitals for the insane.

The remarks on home and hospital treatment, if duly heeded, would prevent an incalculable amount of trouble both to the insane and to their friends. What physician is not witness to unnecessary suffering arising from the popular errors on this subject, or the obtruded advice of those whose zeal springs solely from ignorance and prejudice? To one of these self-constituted advisers who persuaded the friends to keep at home, instead of sending to a hospital, a desperately suicidal young woman who cut her throat the next day, her medical attendant justly exclaimed, "You, you are the real murderer." The relative advantages of home and of hospital management are clearly set forth. The former is proper enough where only nursing and medical treatment are required, but the latter is indispensable in the case of one who needs constant restraint, moral or mechanical. "Here are combined the restraining influences of new surroundings, new acquaint-

ances and modes of life, a habit of acquiescence in the physician's authority on the part of all, sane and insane; and a routine which carries the patient along insensibly in a prescribed course." Besides, the brain in insanity needs rest, as much as a broken limb, and, as Dr. F. quaintly puts it, "to some the hospital is, for the time, a mental fracture-box and splint."

The routine prescriptions in which our medical brethren are so apt to indulge are effectually disposed of in a few curt sentences, which we quote for their benefit: "Travel is too often recommended indiscriminately in all forms and every stage of mental disease. It is advised when the patient is unable to respond to its pleasant excitation by reason of his mental preoccupation, and when he needs, rather, quiet and medical attention. Nothing is more sad than to see a forlorn and dispirited patient dragged from city to city, or crossing the sea and enduring all the fatigue and annoyance of foreign sight-seeing, in search of that rest and peace of mind which he could have found in a few weeks at the nearest hospital. Another fashionable prescription is 'quiet and country air,' which, being good things in their way, are too often thought to have a specific influence in the cure of mental disease. . . . Too often the patient takes the responsibility of his own case with him, is thrown on his own resources, and lacks the moral support he might find in other surroundings. The *ennui* of country life is often insupportable, and tends to increase the existing depression." More truth has been seldom contained within so small a compass.

A large part of the book is devoted to the medico-legal relations of insanity, and very "plain talk" it is, and need enough of it, too. While the physician will find in it ample material for instruction and guidance, the public may learn, if it pleases, many a useful lesson respecting its duties to the insane. Our limits forbid more than a glance at one of the various points considered by Dr. F. with singular force and clearness,—and that is the removal of patients to hospitals. On this subject there exists in the community a state of ignorance, prejudice, distrust, and bad feeling, disastrous to all parties concerned, and discreditable to modern civilization. Once it was universally supposed that the friends would treat the patient as discreetly and tenderly as if his disease were a fever or consumption, instead of insanity. But the times and the manners have changed. Now, it seems as if every patient in a hospital for the insane is to be regarded as presumptively sane, while every device of the law, all manner of deceit and false-witness, every sort of clap-trap and popular clamor are to be invoked to procure his discharge and punish the authors of the wrong. The result of this state of feeling is that friends are deterred from resorting to the hospital until it is too late, and physicians shrink from a duty which may be followed by vindictive pains and penalties. Who has not witnessed the original of the following picture so truthfully sketched in these pages?—"Take, for instance, a man who, up to middle life, has been temperate, industrious, a kind father and husband, and a successful business-man. By degrees a naturally quick temper becomes uncontrollable. It involves him in difficulties which react upon him and increase and develop an hereditary tendency to disease. In a few years his character has decidedly changed, his amiable traits have disappeared, and all his bad qualities have grown upon him. He may or may not have taken to drink. His abuse has driven away his children, alienated his friends, and made his wife sick and wretched. His home is ruined, his property melted away in fruitless lawsuits and damages for assaults. At last, in sheer self-defence, his wife attempts to secure his custody in a hospital for the insane. A few business friends, his lawyer and others, in a meddlesome spirit of philanthropy, rally around him, and denounce the attempt as an outrage. He has money, self-control, influence, business momentum to carry him on; his wife nothing, and, still worse, has to contend with a real love for her husband as he was, and a fear of his often-threatened revenge if she is successful. Physicians bold enough to help her, do it at the risk of prosecution, and without hope of reward." If it had been added that before the final step were taken, some fearful act of violence was committed, the sketch would have been still true to life.

In one of the newspapers of this city there appeared, the other day, an editorial paragraph respecting the class of cases,

which have been so numerous of late, of homicides committed by insane people, in which it was seriously inquired why such persons were allowed to go at large. As if for much of this mischief the editor and his kind are not deeply responsible. As if any one of those cases could have been kept in a hospital had his friends, after much tribulation, succeeded in placing him there. A law conceived in iniquity and passed in folly would have enabled him to communicate with every lawyer in the State; the great writ which our simple fathers believed to be only a great instrument for furthering the ends of justice, would have brought him before a court; a story in which the kindness, forbearance, and long-suffering of parents, children, brother and sister, and their judicious well-advised measures for his welfare are perverted into damning proofs of cruelty, greed, and oppression, would have procured his discharge, and straightway there would have arisen from the newspaper press throughout the whole length and breadth of the land a shout of triumph over the failure of a scheme of high-handed villany. How long is it since, in this city, a man as clearly and thoroughly insane as any inmate of the Pennsylvania Hospital—who had quit his business, squandered his property, and threatened violence to his family—brought his case before a jury, who virtually declared by their verdict, not that he had recovered, but that he never had been insane? The briefest notice of all the cases of this kind which have been brought to prominent notice within the last three or four years would fill many columns of the *Medical Times*. And yet surprise is expressed because crazy people are suffered to go at large to maim or kill at the prompting of their delusions or their frenzy.

We should like to touch upon other aspects of this subject as presented by Dr. Fisher, but our limits forbid. But we trust enough has been said to convince our medical readers that this book, though ostensibly addressed to the general public, will be found by them profitable for doctrine, for correction, and for instruction.

#### THE TRANSACTIONS OF THE SECOND ANNUAL SESSION OF THE MEDICAL SOCIETY OF VIRGINIA, OCTOBER, 1871.

This volume of transactions contains some papers of sterling merit. A Report on the Cattle-Disease, by Frederick Horner, Jr., M.D., of Fauquier County, Virginia, is of interest to medical men. From this paper we glean that, in all countries where the subject has been scientifically investigated,—viz., France, England, Russia, Holland, and the United States,—the disease is evidently one of true blood-poisoning. Whether the poison or virus is an effluvium, or is taken into the stomach with the food and water, or is the *Ixodes reticulatus*, or tick which infests the skin of Texas cattle, observation and the microscope have yet to decide. The greatest danger arises from watering in stagnant pools after infected stock, in hot weather, and overcrowding cattle on the cars. Cattle merely driven across the commons where Texas cattle have grazed have sickened and died. In proof of the danger arising from introducing the meat of such animals into the system, the writer recalls the fact that, while stationed at Buenos Ayres on board of a naval vessel, the crew were made the subjects of a distressing dysentery by eating the flesh of cattle that had been overdriven. Dr. Horner warns the epicure whose palate will only be satisfied with blood-gravy and half-cooked meat against the contaminations existing in the diseased hog and Texas cattle. He recommends inoculation of cattle according to the method proposed by Flint in his work on "Milch Cows and Dairy Farming."

In the so-called hog- and chicken-"cholera," the symptoms of the latter disease this observer found to be invariably absent. In the hog the disease seemed to be a low form of fever, in which the liver, lungs, and bowels became congested, inflamed, and ulcerated. In many instances the liver was covered with cysts filled with serum. Buckle, in his "History of Civilization," truly declares that until the diseases of animals are included in the studies of the pathologist, his conclusions will be little better than empirical, on account of the narrowness of the field from which his facts have been gathered; and with this in mind, all researches of the kind set forth in Dr. Horner's paper should be welcomed by the profession.

Another good paper in this volume is an essay on "Dysmenorrhœa," by Dr. John H. Claiborne, of Petersburg. The



author, not forgetting that this affection, like dropsy, is a symptom of disease, and not a disease itself, attacks the theory of Dr. Sims that there is no such thing as constitutional dysmenorrhœa; and that there can be no dysmenorrhœa if the canal of the neck of the womb be straight, and large enough to permit the free passage of the menstrual blood. While granting that obstruction may be, and often is, an agent in this affection, Dr. Claiborne ascribes to neuralgia, the rheumatic diathesis, and engorgement of the womb and ovaries, their abundant share in its production, even though the uterine canal may be freely and thoroughly open. In this view he is supported by Bennett and Scanzoni,—the former teaching that menstruation may be acutely painful without impediment existing of any kind; and the latter, in his treatise upon the diseases of women, not including mechanical obstruction at all as one of the causes of this disorder. Dr. C. also supports his statements by well-drawn notes of four interesting cases. Rest before the expected menstrual period, emollient vaginal injections, anodynes, and the free use of antiphlogistics and counter-irritants, have done more for him than the dilator, the sponge tent, and the hysterotome.

It is somewhat a matter of wonder that a man of the evident ability of Dr. Claiborne, after writing a scientific paper, should so thoroughly undermine its structure with a silly and impolitic foot-note. Referring to his last case of dysmenorrhœa, caused by mental emotion,—i.e. unrequited affection,—he says, "If the hero of this story be inquired after, I will say that he still lives,—that in the late internecine war he played no unimportant rôle,—and that he has fully illustrated the treachery of which these lines have shown him capable, by selling self, and soul, and section, for Federal place." *Verbum sat sapienti!*

#### TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW JERSEY, 1871.

An interesting essay upon the "Sphygmograph and its Relations to Circulatory Physiology," by Dr. E. Holden, of Newark, appears in this volume. Dr. Holden devised an artificial heart and capillary apparatus, made of rubber, with a large sphygmograph two feet in length to record its workings. In addition to this, many interesting observations were made with an inch rubber hose, connected with a steam-engine; a lever six feet in length, connected with the sphygmograph, its distal extremity resting upon the hose, produced tracings which were varied by obstructing the orifice of delivery, interposing dilations or constrictions in the tube, etc. Finally, a large number of these experiments were made upon the human subject. Dr. Holden claims an improvement in his apparatus over that of Marey in the arrangement of the pen for tracing the movements of the lever. In the first place, the pen is pivoted, thus requiring the paper and not the tracer to support its weight. Another improvement is based upon the fact that a cone made to impinge against a flexible lever will move at a distance proportionate to the angle made by the periphery of the cone with its axis. In other words, the lever that rests upon the pulse has its distal extremity conoidal and bent into an inclined plane, which impinges upon another straight and very light lever carrying the pen; and by this arrangement friction is obviated and the movements of the artery are recorded in tracings upon the paper.

Dr. Holden in the body of his article makes this lucid comparative illustration of the working of his apparatus: "Let us study," says he, "the pulse-tracings from a rational common-sense stand-point. Suppose we have before us the hose of the ordinary fire-engine as constructed in its primitive days, before the alternate pumps were devised, and when, as a consequence, the stream of water thrown was perceptibly intermittent. The tube, from the instant the piston has ceased to descend and the volume of water has been forced through it, begins to collapse with a rapidity proportioned to the size of the delivery-pipe. When the second stroke comes, the flattening hose swells, and the hand or lever placed upon it is raised. Now, if the impulse has been sudden and of short duration, and the delivery be unobstructed, the lever is raised vertically, and instantly descends, so that a pencil at the end would describe merely an ascending and descending line in the same plane; but if a paper to record the pencilling be moved evenly along, the rise and fall of the lever would give a cone-shaped tracing. Should, however, the fullness be prolonged either by the pro-

longation of the impulse or by some obstruction immediately in front of the point of observation, the lever would remain raised as the paper moved along, and the wedge would be flattened at the top. If the force exercised had been very sudden, the tube, if at all elastic, would have been a little more than filled,—i.e. distended,—and the lever would fall back a trifle before entering upon the plane. If the regurgitation had been more distant and the stroke of the pump slow, a regurgitant wave would have resulted that would have had a point of commencement in the downward line proportioned to the time that should have elapsed after the subsidence of impulse and the distance of the obstruction." The writer claims that all these features will be found in observation upon the human circulatory apparatus,—not forgetting that the tube, instead of terminating in a single delivery-pipe, divides and subdivides into numerous branches, the united calibre of which slightly exceeds that of the main tubes.

Dicrotism is said to arise simply from the fact that the capillaries are peculiarly elastic, their dilatability and elasticity being increased as their calibre diminishes. Each impulse, therefore, transmitted through them, produces, however briefly, a dilatation,—an over-fullness,—which reacts upon the contained current to produce a superficial retardation, such as is seen along the banks of a running stream. Obstruction, therefore, the author does not believe to be the usual cause of dicrotism; neither can it exist if the propulsive power be weak or the amount of blood unduly great.

A great many diagrams follow, illustrative of mitral and aortic regurgitation, etc. Whether the minute shades of difference in these curves shall ever become significant depends, of course, upon thoroughness and constancy of investigation, as the science is yet in its infancy.

In these Transactions Dr. Forman reports a case of strychnia-poisoning. A lady fifty years of age had been taking, as a tonic, iron, quinia, and strychnia (the latter in doses of  $\frac{1}{2}$  of a grain), for several weeks. The strychnia was gradually increased to gr.  $\frac{1}{16}$  t. d. The fourth day after the increased dose, violent tetanic spasms supervened, affecting the respiratory muscles to such an extent that asphyxia was imminent. During these convulsions, which occurred in rapid succession, there was intense pain in the legs, neck, and lower portion of the spine. Formication and inability to move the lower extremities occurred during the intermissions. The pulse was 80, and the intellect unimpaired.

Ten minims of Magendie's solution of morphia were injected into her arm, and thirty drops of chloroform in an ounce of whiskey given by the mouth. In half an hour afterwards convulsive action was confined mostly to the limbs. Fifteen minims of Magendie's solution of morphia were now hypodermically administered. Two hours and a half afterwards, twenty grains of chloral were given. The patient then slept for two hours, when the dose of chloral was repeated. The patient recovered. The history of the case would lead us to infer that strychnia (though given in solution), like digitalis and some other potent remedies, sometimes exercises a cumulative effect.

#### TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF WEST VIRGINIA, 1871.

Dr. Henry J. Wiesel, of Wheeling, reports five cases of trichinosis,—the first cases of the kind that had made their appearance in West Virginia. On the 4th of March five persons ate some raw smoked ham at supper. We select the clinical career of one to illustrate the sickness of all. A man aged twenty-eight years, who had partaken of the largest quantity of the ham, was seized two hours afterwards with gripping pains in the stomach, to which various remedies gave no relief; and in two more hours diarrhœa and vomiting set in. The third and fourth days, drawing pains in the limbs came on, which prevented full extension. The fifth and sixth days, profuse lachrymation and photophobia were experienced. On the ninth day red spots appeared under the sclerotic coats of the eyes, and on the twelfth day purple spots on the face and chest. Insomnia, excessive thirst, diarrhœa at the rate of twenty-five stools, and vomiting, were at this time every-day symptoms. The ham was inspected; to all appearances it was healthy, and had been obtained from a well-regulated pork-packing house. A piece of the ham was subjected to micro-

scopical examination. A careful computation revealed about 250,000 parasites to the square inch; and according to this the patient must have swallowed about one million of *Trichinae*. The patient continued to "run down hill" until his weight decreased from 148 to 99 pounds. About the sixty-fifth day his languor began to decrease, the diarrhoea being reduced to three stools a day, and the vomiting entirely checked. After this period he progressed towards rapid convalescence.

The treatment in these cases was devoted to allaying irritation of the bowels and stomach, relieving abdominal and muscular pain, overcoming debility, and imparting rest. A light nutritious diet, brandy, buttermilk (which seemed particularly palatable), injections of sulphate of iron in starch-water, and by the mouth lime-water, creasote, opiates, hydrate of chloral, quinine, and iron. The limbs were packed in solution of carbolic acid. Chlorine-water—one drachm every two hours—was commenced after the forty-fifth day, and seemed to exercise a beneficial influence.

In the works of Pagenstecher, Virchow, and Leuckhardt may be found all that is known of the history, pathology, and treatment of this disease.

### BOOKS AND PAMPHLETS RECEIVED.

Injuries of Nerves and their Consequences. By S. Weir Mitchell, M.D., Member of the National Academy of Sciences, Physician to the Philadelphia Orthopedic Hospital and Infirmary for Diseases of the Nervous System. 8vo, pp. 377. Philadelphia, J. B. Lippincott & Co., 1872.

History of Medicine from the Earliest Ages to the Commencement of the Nineteenth Century. By Robley Dunglison, M.D., LL.D., late Professor of the Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia, etc. etc. Arranged and Edited by Richard J. Dunglison, M.D. 12mo, pp. 287. Philadelphia, Lindsay & Blakiston, 1872.

The Urine and its Derangements,—with the Application of Physiological Chemistry to the Diagnosis and Treatment of Constitutional as well as Local Diseases; being a Course of Original Lectures delivered at University College, London. By George Harley, M.D., F.R.S., etc. With Illustrations. 12mo, pp. 334. Philadelphia, Lindsay & Blakiston, 1872.

Worms. A Series of Lectures on Practical Helminthology, delivered at the Medical College of the Middlesex Hospital. With Cases illustrating the Symptoms, Diagnosis, and Treatment of Internal Parasitic Diseases. By T. Spencer Cobbold, M.D., F.R.S., etc. 12mo, pp. 178. Philadelphia, Lindsay & Blakiston, 1872.

The Irritable Bladder—its Causes and Treatment; including a Practical View of Urinary Pathology, Deposits, and Calculi. By Frederick James Gant, F.R.C.S., Surgeon to the Royal Free Hospital. Third Edition, Revised and Enlarged, with additional Wood Engravings. 12mo, pp. 221. Philadelphia, Lindsay & Blakiston, 1872.

Memoranda on Poisons. By the late Thomas Hawkes Tanner, M.D., F.L.S. Third and Completely Revised Edition. 18mo, pp. 155. Philadelphia, Lindsay & Blakiston, 1872.

Dr. Rigby's Obstetric Memoranda. Fourth Edition, Revised and Enlarged. By Alfred Meadows, M.D., author of "A Manual of Midwifery," etc. 18mo, pp. 104. Philadelphia, Lindsay & Blakiston, 1872.

Trial of Mrs. Elizabeth G. Wharton on the Charge of Poisoning General W. S. Ketchum. Reported and Published by the *Baltimore Gazette*.

An Investigation concerning the Mechanism of the Ossicles of Hearing and the Membrane of the Round Window. By Charles H. Burnett, M.D., Aural Surgeon to the Philadelphia Dispensary, etc.

Fourth Annual Report of the Board of Managers of the Philadelphia Orthopedic Hospital for the Treatment of Bodily Deformities and Diseases of the Nervous System.

Lectures on Aural Catarrh; or, The Commonest Forms of Deafness and their Cure. By Peter Allen, M.D., F.R.C.S., etc. 12mo, pp. 277. New York, Wm. Wood & Co., 1872.

Lithotomy and Lithotripsy illustrated by Cases in the Practice of Gurdon Buck, M.D., Visiting-Surgeon to the New York Hospital and Presbyterian Hospital, etc. Pamphlet. Wm Wood & Co., 1872.

The Treatment of Venereal Diseases: a Monograph on the Method pursued in the Vienna Hospital under the Direction of Prof. Von Sigmund; including all the Formulæ. By M. H. Henry, M.D., Surgeon to the New York Dispensary, —Department of Venereal and Skin Diseases,—etc. Adapted and arranged from the German. 8vo, pp. 49. New York, Wm. Wood & Co., 1872.

The Physiological and Therapeutical Action of the Bromide of Potassium and Bromide of Ammonium. By Edward H. Clarke, M.D., and Robert Amory, M.D. 8vo, pp. 178. Boston, James Campbell, 1872.

### GLEANINGS FROM OUR EXCHANGES.

THE CAUSE OF ASTHMA.—Professor E. Leyden, of Königsberg, reports, in *Virchow's Archives* for March 15, five cases of asthma in which careful examinations of the sputa during the paroxysms were made. These contained roundish bodies of the size of a millet-seed, which under the microscope were found to consist of densely-crowded, round, granular cells, as large as mucous corpuscles, and of delicate crystals. The latter were colorless, having very little lustre, and octahedral in shape. They varied in size, some being large enough to be detected by the unaided eye; others could only be seen when a microscopic examination of the sputa was made. They were very fragile, being readily broken by the slightest pressure. Similar crystals have been found by Robin, Charcot, and Neumann in spleens removed from the bodies of patients who had died of leukaemia, and by Wagner in the portal blood of a puerperal woman. They are not dissolved by cold water, alcohol, ether, or chloroform, and very slowly by ammonia, but are readily soluble in warm water, acetic, tartaric, and phosphoric acids. Concentrated sulphuric and muriatic acids produce a hook-like bending of the ends of the crystals.

Prof. Leyden holds that these crystals are the cause of the paroxysms which occur in asthmatic patients, believing that, in consequence of the irritation of the bronchial mucous membrane which they produce, spasm of the muscles of the bronchial tubes is produced,—exactly what takes place when irritating vapors or substances are inhaled. He proposes that, during paroxysms of asthma, the patient should inhale a solution of chloride of sodium and carbonate of soda, by which he thinks these crystals will be dissolved and their formation in the bronchial tubes prevented.

LARYNGISMUS STRIDULUS.—Dr. A. Hauner (*Journal für Kinderkrankheiten*, January and February), in the many autopsies which he has made of children dying of Laryngismus stridulus, has not found a constant lesion of the larynx or of any other part of the body. He therefore believes the disease to be a neurosis arising from some alteration of the brain, medulla oblongata, or peripheral nerves. Some of the symptoms resemble those produced in animals by section of the medulla oblongata. He has found no treatment positively curative, but recommends the administration of a few drops of a tincture of musk and amber.

THE INFLUENCE OF THE SYPHILITIC DIATHESIS UPON WOUNDS.—The conclusions of Dr. Merkel (*Archives Générales*, March, 1872; from *Centralblatt*, 1871, 4) are as follows: 1. Syphilis usually has no effect upon the natural course of wounds. 2. If, however, the infection has taken place only a short time before the wound, manifestations of the diathesis may sometimes occur. 3. Wounds, even when serious, as those involving articulations or those accompanied by inflammation of the deep tissues, are not generally influenced by the existence of syphilis. 4. The manifestations of syphilis

consequent upon wounds are almost always cutaneous, and are observed immediately around the cicatrix or on the parts of the skin which are their usual seat.

**THE EXTRACT OF CONIUM IN GATHERED-BREAST.**—Dr. Carl J. Stadler calls attention (*Wiener Medizinische Presse*, March 24, 1872) to the extract of conium in cases where abscess of the mammary gland is threatened. He recommends that half a grain of it should be given four times daily. To be of service, the treatment must be begun early.

**PECULIAR TREATMENT OF SYPHILITIC IRITIS.**—Dr. De Magri, of Milan (*Lancet*, March 23; from the *Giornale delle Mal. Veneree*, February, 1872) has treated a number of cases of this kind by injecting calomel into the left arm. He usually injects six grains of calomel, suspended in glycerine; an abscess, mostly connected with sloughing, forms, and the eye instantly improves. Atropia is, however, freely instilled into the latter, but the improvement is attributed to the powerful counter-irritation exerted in the arm. Even cases of pannus and scrofulous keratitis are thus treated, and with equal success.

### MISCELLANY.

**PROF. DICKSON'S SUCCESSOR.**—Dr. J. M. DaCosta has been elected Professor of the Theory and Practice of Medicine in the Jefferson Medical College of this city,—a selection which will gratify not only his numerous friends, but those of the College.

**RESIGNATIONS.**—Dr. James Tyson has resigned his position as Attending Surgeon to St. Joseph's Hospital, also that as Chief of the Medical Clinic at the University of Pennsylvania.

Dr. Richard J. Duglison has resigned his position as Attending Physician to the Pennsylvania Institution for the Blind, which he has held for the last twelve years, in order to devote himself exclusively to literary labor.

**THE Medical Faculty of the University of Pennsylvania** have appointed Professors Joseph Leidy and Robert E. Rogers delegates to the American Medical Association.

**CHANGES IN BELLEVUE HOSPITAL MEDICAL COLLEGE.**—We are informed by the *New York Medical Journal* that the following important changes have taken place in the Faculty of this College: Prof. B. W. McCready having resigned, Prof. W. A. Hammond will assume the chair of *Materia Medica* and Therapeutics and Clinical Medicine, in addition to that of Diseases of the Mind and Nervous System. On the latter branches he will continue his lectures and clinics as heretofore. In consequence of the resignation of Prof. Stephen Smith, Dr. A. B. Crosby has been appointed Professor of Descriptive and Surgical Anatomy. Dr. E. G. Janeway has been made Professor of Pathological Anatomy. Dr. E. L. Keyes has been appointed Professor of Dermatology.

**UNIVERSITY MEDICAL COLLEGE, NEW YORK.**—Dr. Joseph W. Howe has been appointed Clinical Professor of Surgery; Dr. Henry S. Hewit, Professor of Clinical Surgery; Dr. Arnold, Professor of Pathological Anatomy; and Dr. Kammerer, Professor of Diseases of Women and Children, *vice* Dr. F. D. Lente, resigned.

**SIR ROBERT CHRISTISON.**—On the 23d of February this distinguished physician attained his jubilee, having been a Professor of the University of Edinburgh for fifty years,—being about the only Professor of that university who has served so long during the three centuries that it has existed. The event was celebrated by the presentation of a sword of honor by the University Volunteer Rifle Corps, of which

body Sir Robert has been captain since its formation; by the presentation of a congratulatory address from the Edinburgh University Club of London; and by a banquet in the evening.

**DEATH OF DR. W. W. GERHARD.**—This distinguished physician died at his residence in this city, April 28, 1872, aged sixty-three years.

**MORTALITY FROM SMALLPOX.**—The number of deaths from smallpox in Philadelphia during the weeks ending April 13 and 20, 1872, were respectively 71 and 62, of which 87 were of minors.

**MORTALITY OF PHILADELPHIA.**—The following reports are condensed from the records at the Health Office:

	For the week ending	
	April 13.	April 20.
Consumption . . . . .	62	50
Other Diseases of Respiratory Organs . . . . .	76	57
Diseases of Organs of Circulation . . . . .	13	13
Diseases of Brain and Nervous System . . . . .	64	58
Diseases of the Digestive Organs . . . . .	28	26
Diseases of the Genito-Urinary Organs . . . . .	6	4
Zymotic Diseases . . . . .	103	87
Cancer . . . . .	7	9
Casualties . . . . .	16	7
Debility . . . . .	39	20
Intemperance . . . . .	1	3
Malformation . . . . .	0	2
Murder . . . . .	2	0
Old Age . . . . .	10	10
Scrofula . . . . .	3	2
Stillborn . . . . .	17	18
Suicide . . . . .	0	1
Syphilis . . . . .	1	1
Tetanus . . . . .	1	1
Tumors . . . . .	1	0
Unclassifiable . . . . .	10	13
Unknown . . . . .	2	1
<b>Totals . . . . .</b>	<b>462</b>	<b>383</b>
<b>Adults . . . . .</b>	<b>214</b>	<b>162</b>
<b>Minors . . . . .</b>	<b>248</b>	<b>221</b>

### OFFICIAL LIST

**OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U. S. ARMY, FROM APRIL 5, 1872, TO APRIL 18, 1872, INCLUSIVE.**

**MILLS, MADISON, SURGEON.**—By S. O. 86, War Department, A. G. O., April 11, 1872, granted sixty days' extension of leave of absence.

**BAILY, J. C., SURGEON.**—By S. O. 48, c. s., Department of California, relieved from duty at the Presidio of San Francisco, and to await further orders there.

**McMILLIN, THOS., ASSISTANT-SURGEON.**—By S. O. 48, Department of California, April 2, 1872, assigned to duty at the Presidio of San Francisco, Cal.

**BREWER, J. W., ASSISTANT-SURGEON.**—By S. O. 53, Department of the Missouri, April 3, 1872, assigned to duty at Fort Hacker, Kansas.

**MIDDLETON, P., ASSISTANT-SURGEON.**—By S. O. 74, Department of the South, April 9, 1872, granted leave of absence for thirty days.

### NAVY NEWS.

**LIST OF CHANGES IN THE MEDICAL CORPS OF THE U. S. NAVY SINCE APRIL 6, 1872.**

**Surgeon G. W. Woods** detached from U.S.S. Lackawanna, and ordered to the Naval Hospital, Mare Island, Cal.

**Surgeon W. K. Scofield** detached from the Vermont, and ordered to the Lackawanna.

**P.-A.-Surgeon D. McMurtrie**, to the receiving-ship Vermont.

**Assistant-Surgeon W. M. Nickerson**, to the Navy Yard, New York.

**Surgeon Wm. M. King** detached from the receiving-ship Sabine, and waiting orders.

**P.-A.-Surgeon H. M. Rundlett**, to the receiving-ship Sabine.

**P.-A.-Surgeon F. M. Dearborne**, to the Naval Hospital, Chelsea, Mass.